

THE ELECTRIC HONEYPOT: THE PROFITABILITY OF DEREGULATED ELECTRIC GENERATION COMPANIES

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INTRODUCTION

Purpose and Conclusions of the Study

This report presents the results of an investigative financial analysis of utility companies operating in deregulated markets. The study reviews the profitability of corporations that are the largest sellers of unregulated wholesale generation into the PJM market¹ (“PJM Companies”). Primary objectives of the inquiry are to gather and summarize financial data for these PJM companies and compare their financial performance with that of regulated, vertically owned utility companies (“Regulated Companies”). Through measuring profits and shareholder value of PJM Companies relative to Regulated Companies, the extent to which investors have benefited from deregulation is examined.

The analysis of each PJM company includes an examination of its recent financial history, as reflected in financial reports, stock prices and dividends. Revenues earned by companies and their shareholders ultimately come from either cost savings or increases in bills paid by consumers. While it is possible that the shareholder benefits reflect productivity improvements in the generating plants, the price increases that have occurred with the expiration of rate caps demonstrate that a good degree of these benefits are coming from higher consumer bills.

This comparative financial analysis of PJM Companies and Regulated Companies includes an informed assessment of the following issues:

- What are the aggregate earnings or losses that PJM Company shareholders have received since the inception of electricity deregulation?
- How have particular aspects of retail and wholesale restructuring affected key indicators of financial performance for generating companies?
- Did the recovery of stranded investment² enhance the profitability of the PJM companies?

¹ These power plants are no longer owned or have never been owned by utility companies regulated by state public service or public utility commissions. They would still fall under other regulations, such as those pertaining to environmental, labor or safety standards.

² Stranded investment refers to the portion of generation costs that utilities projected could not be recovered under market rates. These stranded investments were estimated as part of most retail restructuring proceedings, and recovered from ratepayers.

- What particular characteristics (*e.g., fuel mix*) of PJM Companies are the primary drivers of financial performance?
- What is the combined profit from utilities divesting plants and from merchant returns?

This study found that companies that have fared best under deregulation share certain common features. Among those features are:

- Ownership of base load generating assets that were formerly regulated and subject to cost-of-service regulation.
- Concentration of generating assets in PJM rather than elsewhere in the nation or the world.
- High proportion of income from generation rather than distribution or trading.

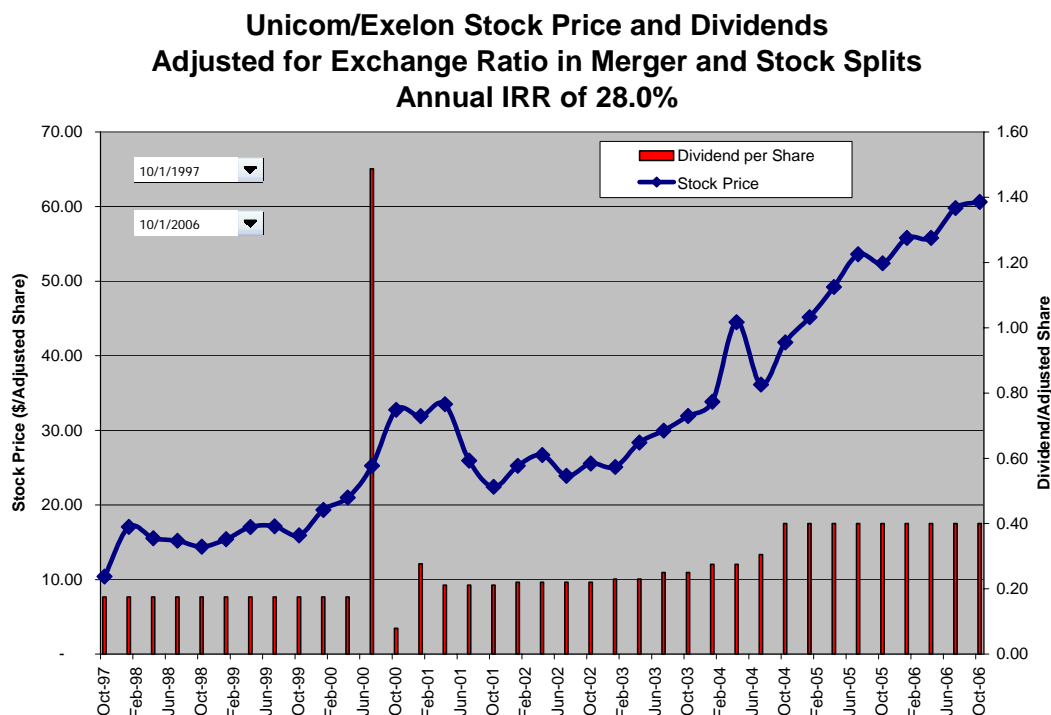
This investigation reveals that shareholder value for those PJM companies which have unregulated generating capacity concentrated in the region and which have continued to also own a regulated transmission and distribution subsidiary, has been higher than companies that remained entirely regulated. The current and prospective profitability has been realized not because the nature of capacity changed after deregulation – generating assets that have been most profitable are those that were built in a regulated environment. Rather, the investor returns have come about because retail choice legislation provided for stable and assured cash flows over a transition period, followed by a subsequent period of increased profits after the rate caps and fixed price contracts expire. Since these transition periods included stranded investment recovery, the net investment associated with older base load plants has been diminished, and the profits for deregulated generation are far higher than they would be if the plants were still under cost-based regulation.

Analysis of PJM companies shows that high returns after rate caps expire are worth billions to investors. During transition periods in which companies operate with rate freezes or rate caps, the formerly vertically integrated companies realized returns on investment that exceeded both the return on equity portion of their estimated cost of capital and the shareholder returns earned by Regulated Companies (both of which are discussed later). This demonstrates that the PJM companies are not incurring losses for generating capacity whose cost many utilities had claimed to be unrecoverable through market prices when restructuring began (i.e. stranded investment).

Prospectively, the subset of PJM Companies who own capacity which was formerly regulated will produce about \$4.2 billion per year more in profits than would be earned by typical regulated companies. The accumulated returns that investors have realized from expectations of increased earnings and historic returns as manifested in stock price increases and dividend payments is between \$32 and \$40 billion depending on the period used in computing returns. The accumulated market values of PJM companies that had constructed plants with

ratepayer support have a premium above their book value that far exceeds the estimated premium for regulated companies. This surplus market to book ratio is between \$32 and \$50 billion.

The increase in investor wealth is illustrated by the case of Exelon Corporation – the largest seller of power into PJM. While alternative profit metrics produce varying estimates of shareholder benefits, the minimum investor benefit for Exelon that incorporates both transition period benefits and prospective returns is \$16 billion. This result is counter to a fundamental notion of restructuring – investors should not have been made better off simply by virtue of a changed regulatory framework. The graph below shows the benefits accruing to an investor in Unicom – the former holding company of ComEd, the utility company serving Chicago. The graph accounts for stock splits, share exchanges, normal dividends and special dividends. Once adjustments are made to put shares on an equal footing, the graph shows that a Unicom investor who made an investment at the inception of deregulation would have realized the equivalent of a annual rate of return on his or her investment of 28% in each subsequent year.



The holding period return analysis for Exelon demonstrates the net dollar benefits received by investors relative to the Regulated Company sample. Exelon’s 10-year annual return, which incorporates nearly its entire transition period (when rates were still subject to rate caps), are very high compared to returns on a regulated portfolio. A share holder that initially invested in PECO³ stock would have earned 21.7%, and a shareholder that invested in ComEd stock would have earned a 28% annual return. These returns imply that if a PECO investor made

³ Formerly the Philadelphia Electric Company, PECO merged with Unicom, ComEd’s holding company, to create the Exelon Corporation.

an investment of \$100 in 1996, the investment would have accumulated to a value of \$713 in 2006. If a Unicom investor made the same investment at the start of restructuring, it would have grown to \$1,180 in 2006. By comparison, an investor in the regulated portfolio would have ended up with \$266 after 10 years if he or she invested \$100 in 1996. The main reasons that the Exelon investment performed so well is not that Exelon made efficient investment choices (the company lost money on its investment in a merchant company named Sithe, which it sold in 2004 after it incurred a write-off of \$945 million) nor the efficiency of its plant operations (it retired 2,200 MW of nuclear capacity and its nuclear plants have similar capacity factors and operating costs to other nuclear plants). Rather, the profits have come about directly because of price deregulation as the company generated strong cash flow through its stranded investment recovery charges and is expected to earn very high profits when rate caps expire in the Illinois.

Companies Studied and Criteria for Selection

The PJM Companies whose financial performance is evaluated in this study are listed below. These companies were identified by APPA, as those with the largest 2005 electricity sales from unregulated generation capacity into PJM⁴.

1. Constellation Energy
2. Exelon Energy
3. PSEG - Public Service Enterprise Group
4. PPL Corporation
5. Allegheny Energy
6. FPL Group
7. Dominion Resources
8. NRG Energy
9. Reliant Energy
10. Mirant Corporation
11. AES Corporation
12. PEPCO Holdings
13. Edison International
14. Goldman Sachs

The ranking of PJM Companies in terms of their ownership of unregulated capacity is shown below. Further details of each company's capacity – fuel type, plant names, age and location -- are presented in the individual company profiles.

⁴ Source: Energy Velocity database. Data are for the year 2005.

2005 Summer Capacity, in MWs.						
Source: Energy Velocity data base.						
	Total Capacity (MW)	Capacity in PJM		Total PJM Cap in Group (MW)	PJM Unregulated Cap as Pct of Total in Group	Unregulated PJM as % of Company Capacity
		Unregulated Capacity (MW)	Regulated Capacity (MW)			
Exelon Corp	25,009	20,574	548	21,122	22.3%	82.3%
Public Service Enterprise Group Inc	16,253	13,096		13,096	14.2%	80.6%
PPL Corp	11,037	9,018		9,018	9.8%	81.7%
Reliant Energy Inc	14,559	8,318		8,318	9.0%	57.1%
Edison International (Midwest Energy)	13,901	7,795		7,795	8.5%	56.1%
Allegheny Energy Inc	10,094	6,742	2,812	9,554	7.3%	66.8%
Constellation Energy Group	11,813	6,446	958	7,404	7.0%	54.6%
Mirant Corp	14,083	5,257		5,257	5.7%	37.3%
Pepco Holdings Inc	5,043	4,309	721	5,029	4.7%	85.4%
Dominion Resources Inc	25,050	3,792	15,451	19,243	4.1%	15.1%
FPL Group	33,124	1,982		1,982	2.2%	6.0%
AES Corp	13,158	1,802		1,802	2.0%	13.7%
NRG Energy Inc	21,410	1,683		1,683	1.8%	7.9%
Goldman Sachs Group Inc	5,427	1,281		1,281	1.4%	23.6%
Total in Group	219,960	92,094	20,489	112,583	100.0%	

Data Availability

The availability of financial information for companies selling power and energy into PJM varied from company to company, and, in some cases influenced the choice of companies for detailed analysis. All of the companies selected for this review file financial reports with the Securities and Exchange Commission (“SEC”). Parent (holding) companies for all of the companies also have publicly listed shares. While many years of daily stock price data are available for most of the companies, there are a few exceptions. Stock prices for Mirant exist only since January 2006. For NRG, the stock prices are available from 2003, and for Reliant Energy, there are stock prices since 2001.

Companies in the above list own a wide variety of assets in addition to generating plants that sell power into the PJM wholesale market. Some of the companies have regulated transmission and distribution operations, and others have extensive operations outside of the US. The location of the PJM assets in the corporate structure also differs among the firms. A few of the companies – Reliant, Mirant and Edison International -- publish separate financial statements for subsidiary companies that sell power into PJM. Others hold generating assets in distinct subsidiaries, but combine PJM capacity with capacity serving other areas.

Detailed financial analyses were not conducted for Edison International or Goldman Sachs because of the unavailability of critical data. Edison International owns Southern California Edison and many other assets not related to PJM, but files standalone SEC reports for a subsidiary – Midwest Generation -- that sells generation into PJM. Therefore, instead of computing financial ratios for Edison International, an analysis was made for the Midwest Generation subsidiary. Goldman Sachs sells power into PJM through its J Aron subsidiary. Neither Goldman Sachs nor J Aron publishes data in SEC filings that allow computation of return on investment and other profitability measures for J Aron’s electricity supply operations.⁵

⁵ Goldman Sachs owns 21 generation facilities eight of which are fueled by natural gas and eight of which burn coal. Goldman Sachs first acquired plants in 2003 and currently has electricity revenues of \$496 million.

Classification of PJM Companies

PJM Companies have a variety of fuel types, their assets were acquired in different ways, and they have differing corporate structures and business strategies. Because of these consequential differences, the PJM Companies have been separated into three different groupings for purposes of reporting the results. The three categories for the companies that were evaluated in detail (i.e. excluding Edison International and Goldman Sachs) are:

1. ***Core PJM Companies*** – These companies were formerly vertically integrated, state-regulated utilities, operating in what is now the PJM region. Core PJM companies include Exelon, Constellation, PSEG, PPL and Allegheny. Generating assets owned by companies in this group were generally constructed pursuant to state regulatory approval, where funding of the plants was made possible by rate of return regulation. Much of the generating asset capacity owned by the Core PJM Companies comprises base load coal and nuclear facilities, and the bulk of that generating capacity is located in the PJM region.
2. ***Merchant PJM Companies*** – These companies were not initially formed as regulated utilities, and generally do not have an obligation to provide electricity to retail customers. Instead, the primary business of merchant PJM companies is selling power in deregulated wholesale markets. This group includes Mirant, NRG, Reliant and Edison International’s Midwest Generation. Merchant PJM companies purchased coal, oil and gas fueled generating plants from other companies or constructed new, often gas-fired, plants after wholesale markets were deregulated. Unlike Core PJM Companies, the companies in this category do not own transmission and distribution assets in the PJM region.
3. ***Minor PJM Companies*** – These are companies for which unregulated wholesale power sales into PJM are a relatively minor part of their overall operations. Minor PJM companies include AES, Dominion, FPL and PEPCO. (PEPCO is classified as a minor PJM company because its generation operations are small relative to its distribution assets and because it sold most of its generation capacity to Mirant.) Companies in this group have major foreign generation, large regulated activities outside PJM, most generating plants outside PJM, or significant non-electricity assets such as natural gas pipelines.

Regulated Sample

To benchmark the profitability of PJM companies, a set of companies that still earn revenues under rate of return regulation was also analyzed. The regulated sample was assembled through examining financial data for numerous electric and natural gas companies that are located in states that have not restructured their electricity markets. Companies that receive a large percentage of their income from unregulated subsidiaries and companies that have had

unusual losses are excluded from the sample. After screening many companies, a sample of twenty utility companies was identified.

Overview of Past and Future Changes to Electricity Markets Affecting Financial Performance of Companies

This section provides context for the financial analyses of individual PJM Companies by presenting an overview of some of the changes to PJM markets over the period analyzed. Financial performance of the PJM Companies is affected by electricity market restructuring in both the retail and wholesale sectors. Retail market restructuring at the state level affects the way end-use (business and residential) consumers acquire and pay for electricity. Components of most retail restructuring programs that drive shareholder value include rate freezes, rate caps, stranded investment charges, power auctions and the timing of the implementation of market-based prices for consumers. In addition, profitability is influenced by the removal of regulatory constraints on asset transactions and commodity or service pricing. Many of the deregulated generating assets have greatly appreciated in value as prices have increased in PJM (see for example, the Constellation Energy Group profile).

Investor returns are also affected by the manner in which companies sell power into wholesale markets. Restructuring of wholesale markets in PJM has encompassed changes that affect the price of electricity sold by plants, payments for making generating capacity available, contracts between generation companies and distribution companies (bilateral contracts), locational pricing for electricity and other markets, and special payments for generation deemed necessary for transmission reliability. The following discussion of past and future changes to electricity markets is divided into separate examinations of retail restructuring and wholesale restructuring.


Retail Restructuring

With the exception of West Virginia, states in the PJM region passed legislation that deregulated retail electricity generation service and allowed consumers to purchase power from alternate service providers. While restructuring details varied from state to state, the process generally included rate freezes and permission for utility companies to charge transition fees for inefficient plants – stranded investment (calculated as the difference between the remaining invested cost of the plants and the lower expected revenues from the deregulated market). Provisions of these legislative enactments defined the conditions under which companies could sell their generation assets and established transition periods during which consumer rates are capped and stranded investment charges are paid.

Upon passage of legislation that deregulated prices, many utilities changed their corporate structure. Generation capacity was either sold to an unrelated company or transferred to a generation subsidiary (often newly created). The remaining regulated entities, transmission and distribution (“T&D”) only utility subsidiaries retained the obligation to serve the customers in their service territory who did not purchase power from another entity. Because very few customers actually switched suppliers, these T&D-only utilities needed to purchase power through wholesale market contracts. Supply obligations under rate caps were generally fulfilled

through fixed price bilateral contracts with generators, which are sometimes generation-owning affiliates. Such continuing obligations to provide bundled service are often referred to as a “provider of last resort” (POLR) responsibility.

In preparing the financial analysis we have gathered information on retail restructuring presented by the companies in their investor analyst documents. It is apparent in these presentations that upcoming developments (i.e. removal of rate caps) in retail restructuring are expected to affect returns to shareholders. An example of such information is the slide below from a presentation by Allegheny to investors, which projects increased income to Allegheny Energy when rate caps are removed in Maryland and Ohio. Similar expectations are documented in the individual company profiles.

		Growth Driver: Transition to Market-Based Rates	
	<u>2006</u>	<u>2009</u>	
State	Maryland, Ohio	Maryland	
MWH transitioning to market	4.8 million	3.5 million	
Increase in pre-tax income	\$90 million	\$60 million	
	Total: \$150 million		

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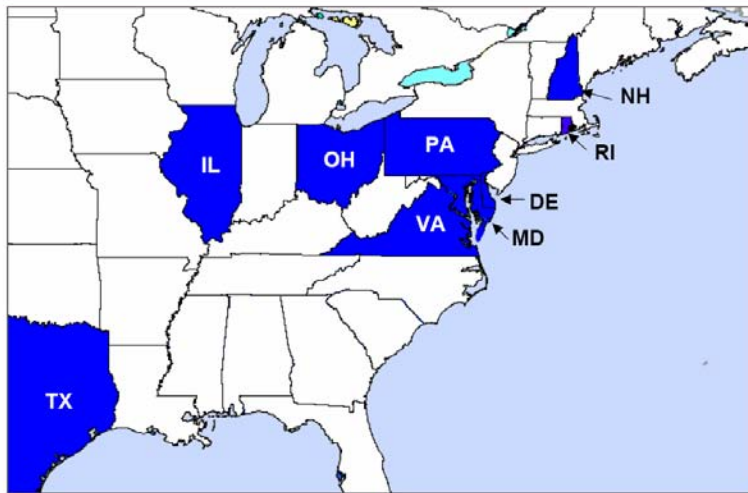
Increases in rates that occur upon the expiration of rate caps mean that on an aggregate basis, some business entity is receiving more money from consumers. When the generation-owning companies are no longer under bilateral contracts with regulated T&D-only utilities subject to rate caps, these companies can sell their generation either through new contracts, reflecting current and expected future prices or through the spot market. To the extent that PJM Companies own lower operating cost, base load nuclear and coal generating plants, these companies benefit by arranging contracts that are more closely aligned with the higher wholesale spot market prices

This issue is particularly pertinent for companies studied in this investigation because most states with rates caps that expire in the next eight years are in PJM as shown on the map below.⁶

⁶ Dominion Presentation to Investors, Boston, MA, May 2006.

States With Electric Rate Caps Expiring By 2015

as of 5/22/2006



Because the rate caps have not yet ended in many states, prospective returns are a better source of information on the potential impacts of the expiration of these caps than historic profitability. Holding period returns – stockholder profits from buying, holding and then selling shares over a defined period -- also measure the anticipated effect of prospective retail rate increases, since stock prices incorporate expectations of future earnings.

When retail choice legislation was being developed, many utilities expressed the concern that they would not be able to fully pay off the remaining book value and operating costs of their generating plants from the revenue earned by selling power at market-based rates. These utilities were therefore allowed to collect such unrecoverable, or “stranded”, costs from the electric rates charged to customers. Stranded investment recovery was intended to be part of a compact – ratepayers would pay off the portion of the plants that would not be recovered in a market, and would receive the “benefit” of rate freezes and the ability to shop for power. But what this study shows is that these formerly regulated companies were able to pay off their stranded costs, and are now reaping the benefits from plants that were much more profitable in the market than anticipated. Meanwhile, few consumers are shopping, and most are facing price increases.

Wholesale Restructuring

The financial status of companies that sell power in PJM is affected by the market rules for setting PJM energy and capacity prices. Energy prices are paid on an hourly basis for electricity that is delivered and capacity prices are paid to generators for assuring that capacity will be available whether the capacity operates or not. PJM rules establish how wholesale electricity prices are computed, how capacity prices are determined, and how “reliability must run” plants will be compensated (discussed later in this section). The switch from cost-based pricing to locational, bid-based pricing was approved by the Federal Energy Regulatory Commission in November 1997. Capacity markets are currently being restructured based upon a

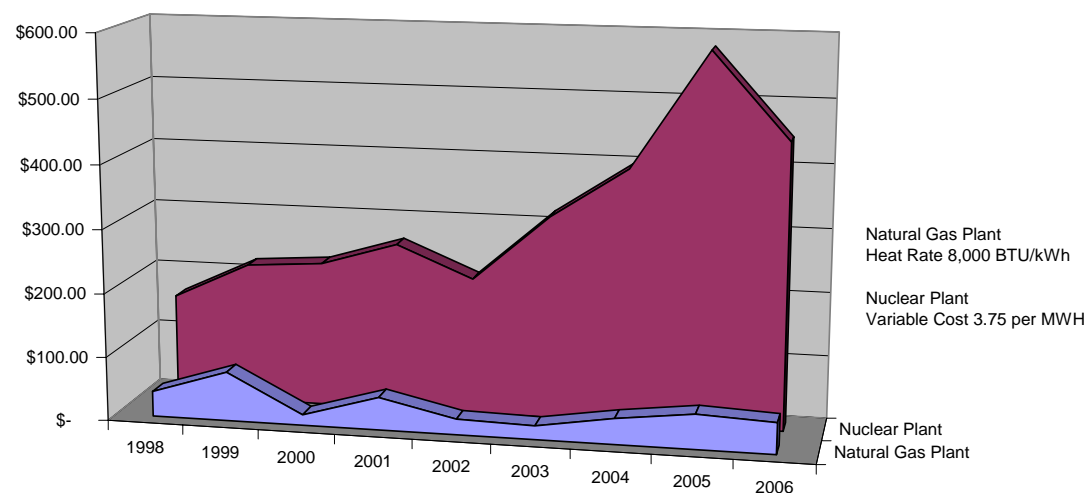
proposal called the Reliability Pricing Model. Naturally, profitability is also affected by the pricing of bilateral contracts between the generation companies and T&D companies for power not sold into the PJM wholesale market.

Energy prices in PJM have increased in the past few years, largely because oil and gas fired plants frequently set the price that is paid to all generators. With single clearing prices used to set prices for all megawatt-hours, these price increments accrue to the net income of all companies, even those that do not produce energy with natural gas or oil plants. Spot market electricity prices are therefore the largest single driver of profit for base load generation plants that do not have bilateral contracts.

In the absence of bilateral contracts with regulated entities under a price cap regime, PJM Companies would earn revenues driven by spot energy prices. Even if new bilateral contracts were arranged, they would be heavily influenced by spot market pricing opportunities. Under such circumstances, the effect of energy price changes on companies will vary according to the types of capacity they own. To illustrate the financial effects on companies with different capacity profiles, the profit per kW of capacity is simulated for a nuclear plant and for a natural gas plants with a heat rate of 8,000 BTU/kWh. This simulation assumes that the two hypothetical plants do not have bilateral contracts and that the plants are dispatched in each hour where it is profitable to operate. The dispatch decision for the illustrative case is made by computing the variable costs of operating the plants (including fuel) and dispatching the plants each hour in which the market price exceeds the variable cost. The excess of energy prices above variable costs for one MW of capacity is accumulated over each year. This analysis demonstrates that the nuclear plant has earned increasing profits from selling energy while the natural gas plants have earned minimal returns. The illustrative cases explain why the Core PJM Companies with base load capacity are projected to have strong financial results once rate caps and associated bilateral contracts expire. Coal plants have a similar pattern as nuclear plants since the variable costs of coal are low relative to the market price.



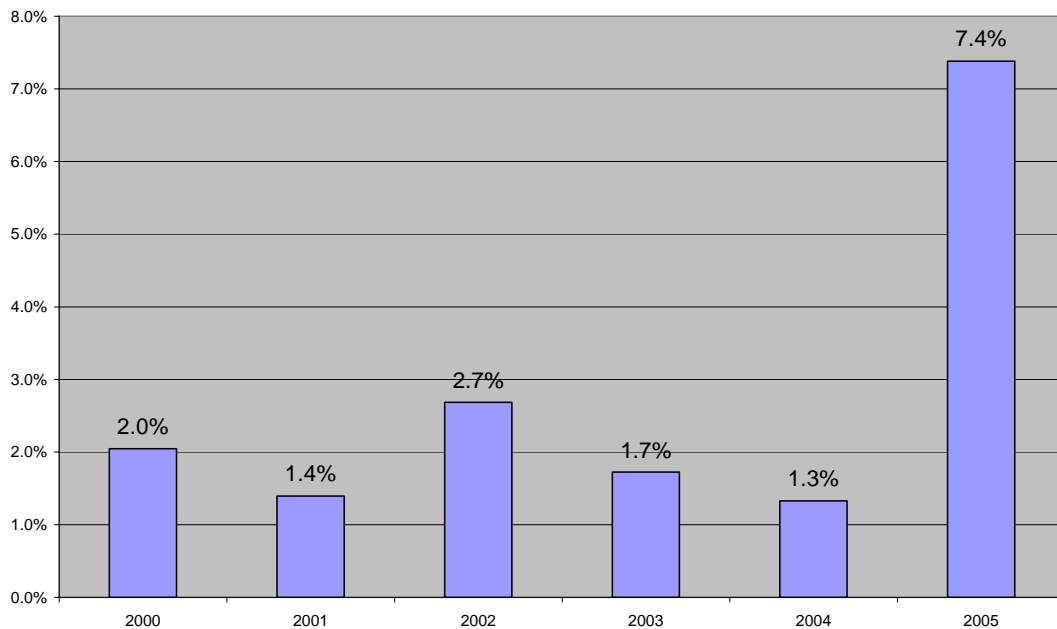
Operating Margin per kW/Year



	1998	1999	2000	2001	2002	2003	2004	2005	2006
Natural Gas Plant	\$39.28	\$76.95	\$16.66	\$51.19	\$24.44	\$21.81	\$40.40	\$54.61	\$48.98
Nuclear Plant	\$163.08	\$218.76	\$226.81	\$262.82	\$213.84	\$317.20	\$395.59	\$578.77	\$445.18

The experience of Midwest Generation (owned by Edison International) is a good illustration of what can happen when fixed-price, transition-period contracts end and generators are free to charge market-based rates. Midwest Generation operates a number of coal plants in Illinois, and prior to 2004, the company sold energy from the plants under fixed-price contracts with Exelon. The company experienced low returns in the 2000-2004 time period, in part because of the high price it originally paid for the capacity in 1999 along with fixed price contracts that were established at the time. However, as shown on the graph below, Midwest Energy's return on investment jumped dramatically once the contracts expired.

Midwest Generation Return on Invested Capital



PJM companies receive revenues from payments for capacity as well as the energy revenues discussed above. In the past, low capacity prices have negatively affected the profitability of some plants in PJM, most notably gas-fired peaking plants that receive a relatively high proportion of their income from capacity payments. After the California power crisis of 2000-2001, capacity pricing has been the subject of many policy debates in the power industry. Generating companies have argued for changes in the structure of markets that would increase capacity prices and (in theory) assure construction of new capacity. In PJM, future capacity prices will be established using its Reliability Pricing Model (“RPM”).

In their investor analyst presentations, many PJM Companies tout the financial benefits of expected increases in capacity prices. For example, PSEG estimates that capacity prices will increase from current levels of less than \$10 per kW per year to as much as \$35 per kW per year by 2008.⁷ The primary features of RPM are the establishment of locational capacity markets using an administratively-determined downward-sloping demand curve; a four-year-forward commitment of capacity; allowing certain planned resources, transmission upgrades and demand resources to compete with existing generation resources to satisfy capacity requirements; and market power mitigation rules (which are applied mainly to existing generation resources).

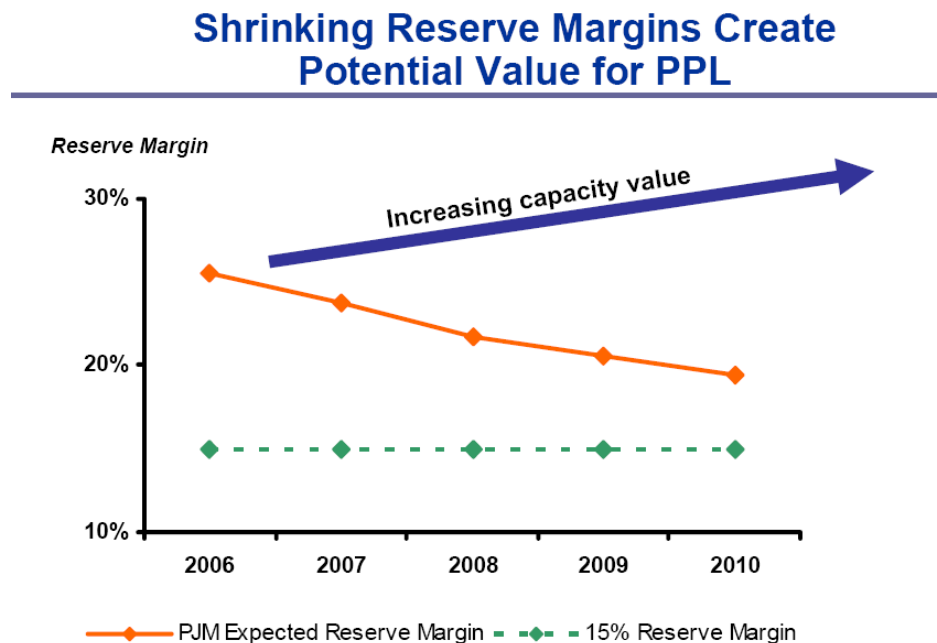
The prospective increases in capacity prices have been the subject of other studies. For example, a report on RPM by Synapse Energy Economics examined the prospective earnings of

⁷ According to PSEG investor presentations: “capacity prices in PJM have decreased to less than \$10 per kW-year in 2003 from historical levels of more than \$25 per kW-year in 2001...This overcapacity has decreased capacity revenues and has decreased margins from some of Power’s units.” With the RPM, capacity prices are expected to increase to “\$20/kW/year to mid \$30’s/kW/year.”

Exelon Corporation's nuclear fleet and four non-nuclear generating facilities in Pennsylvania.⁸ The Synapse study concludes with the projection of:

“a total capacity payment for these 17,000 MW of baseload generation of over \$830 million annually. This may be compared with about \$240 million based on the average market capacity price over the last six years. Thus RPM, as filed by PJM, would mean an additional \$590 million in capacity payments to these existing, largely amortized, base load generating plants in Illinois and Pennsylvania, at consumer expense.”

The generators' perspective is illustrated by PPL's investor analyst presentation below.



In this study, the effect of increased capacity prices is incorporated in the prospective return on equity analysis and the holding period return comparisons. The expectation of increased capacity prices is candidly presented by many of the PJM generators.

Summary of Financial Statistics Presented in Report

No single profit measure can be used to capture all of the financial impacts of the restructuring described above. Accounting changes and write-offs, mergers and acquisitions, changes in capital structure policy, and bankruptcy make the analysis more complex than a simple tabulation of equity statistics. Since there is no unambiguous formula for computing investor benefits, this analysis incorporates various measures of investor return, as discussed in this section of the report.

⁸ “RPM 2006: Windfall Profits for Existing Base Load Units in PJM, An Update of Two Case Studies,” Synapse Energy Economics, February 2, 2006. Available at <http://www.synapse-energy.com>.

Profit measures fall into two general categories: 1) return on investment uses data from financial reports to compute the desired metric -- the profit of companies divided by the amount of cash contributed by investors; and 2) holding period returns – computes a rate of return using the capital gains and dividends received by investors over a defined time frame for an investment, using data from stock prices and dividends.

Interpreting rates of return on investment computed from financial information poses difficulties because it requires a reliance on accounting data. For example, non-recurring write-offs and changes in accounting policy affect the measurement of profit included in the numerator of the return calculation. Further, accounting adjustments for goodwill, accumulated other comprehensive income⁹ and write-offs can distort the investment base that is the denominator in the accounting return calculations. Different capital structure choices, depreciation rates, fresh start accounting after bankruptcy and other items also can affect the standard accounting measures of profit. Even without the accounting issues, standard rate of return measures may not represent the true returns earned by investors.¹⁰

Holding period returns from investing in shares and then receiving dividends and capital gains – does not depend on accounting data. However measurement of the holding period return is affected by the assumed date of the investors' share purchase. Changes in stock market perceptions of energy companies can quickly affect their share prices. If the stock price for a company was low on the assumed start date of the holding period, the company's measured return will be higher. Consequently, it is necessary to compute consistent measures of holding period return for the different companies.

⁹ The adjustments are further described in the Appendix.

¹⁰ This is further discussed in the Appendix.

The table below summarizes issues associated with alternative profit measures.

Summary of Accounting Based Returns and Holding Period Returns				
	Adjusted Return on Equity	Return on Invested Capital	Cash Flow to Capital	Economic Holding Period Return
Formula	Net income to common equity divided by average common equity balance	Net operating profit after tax divided by equity and net debt capital	Pre-tax income before depreciation or cash flow divided by capital or equity	Annualized return on holding a share of stock including capital gains and dividends
Advantages	Fundamental measure of profit in regulated context; unadjusted calculation is simple	Basic measure used by many companies to measure value and productivity without leverage distortion.	Corrects accounting distortions related to depreciation and deferred tax accounting policy	Measures the true economic returns realized by shareholders and not affected by accounting policy
Problems	Does not measure true economic return; affected by leverage and accounting policy	Similar problems to return on equity except leverage; difficult to interpret alternative levels	Difficult to make comparisons and evaluate alternative levels	Requires assumption of alternative holding periods

The Appendix provides the specifics of how these profit statistics are computed, along with their theoretical rationale.

Historic Accounting Rates of Return

The accounting based, historical rate of return metrics computed for each PJM Company and described in the detailed company-specific profiles include the following:

- Return on equity computed from net income and the common equity balance (without adjustments to financial statement data);
- Return on shareholders equity reported by the Value Line Investment Survey;
- Return on equity with adjustments to equity capital to exclude goodwill, accumulated other comprehensive income, and plant write-offs associated with changing accounting methods;
- Return on invested capital, calculated by dividing after tax operating income before interest expense by invested capital (equal to debt plus adjusted equity less cash);

- Cash flow to invested capital, computed by dividing Earnings Before Interest, Taxes and Depreciation (“EBITDA”) -- a measure of cash flow – by invested capital; and
- Cash flow to equity, computed by dividing net income plus depreciation and deferred taxes by the equity balance adjusted for goodwill, write-offs and other comprehensive income.

A summary of the historic rate of return calculations for 2005 and the average of 2000-2005 for PJM Companies on a consolidated basis is shown in the table below. Further details of the return calculations are presented for each company in the detailed company by company descriptions.

Consolidated Return on Investment for PJM Companies												
	Return on Equity Unadjusted		Return on Equity Adjusted		Return on Equity Value Line		Return on Invested Capital		EBITDA to Invested Capital		Cash Flow to Equity Capital	
	2005	Average	2005	Average	2005	Average	2005	Average	2005	Average	2005	Average
Core PJM Companies												
Exelon	23.5%	16.0%	19.4%	18.2%	23.6%	19.8%	11.3%	9.7%	20.3%	18.9%	33.3%	33.2%
Constellation Energy	12.9%	9.6%	12.5%	12.7%	12.3%	11.1%	6.7%	6.5%	17.5%	16.5%	28.0%	25.0%
PSEG	11.2%	14.2%	14.2%	16.1%	10.4%	14.8%	8.0%	7.8%	18.4%	17.3%	26.7%	24.4%
PPL	15.7%	17.5%	16.4%	20.0%	16.5%	18.3%	9.2%	9.6%	12.9%	13.1%	31.6%	49.8%
Allegheny	4.9%	-7.5%	9.5%	-1.8%	14.5%	NA	6.2%	2.9%	15.1%	8.0%	29.8%	11.0%
Merchant PJM Companies												
Midwest Energy	12.3%	-38.1%	8.5%	4.8%	NA	NA	7.4%	2.9%	15.2%	8.4%	15.4%	18.7%
Mirant	-103.0%	-93.8%	17.6%	-1.3%	NA	NA	3.4%	6.8%	4.5%	11.1%	4.5%	13.6%
Reliant	-8.6%	-6.7%	7.3%	12.3%	NA	NA	-0.9%	2.9%	3.3%	8.7%	9.6%	20.4%
NRG	2.6%	9.9%	2.8%	9.9%	NA	NA	5.7%	5.4%	13.7%	11.8%	13.7%	11.7%
Minor PJM Companies												
AES	48.4%	-68.4%	20.4%	11.8%	38.2%		9.8%	7.6%	19.5%	15.7%	8.6%	6.0%
Dominion	9.5%	9.1%	12.3%	19.2%	9.9%	11.2%	13.4%	15.3%	35.3%	38.8%	29.8%	51.2%
FPL	11.0%	11.5%	13.6%	13.2%	10.4%	11.7%	5.6%	7.0%	17.0%	18.8%	35.7%	34.0%
PEPCO Holdings	10.46%	9.69%	17.8%	14.3%	7.7%	9.1%	7.0%	6.4%	13.7%	13.7%	36.1%	42.0%

The return on investment figures in the above table should be evaluated in the context of the cost of capital. This comparison is aided by information presented by investment banks in proxy statements issued to support the proposed mergers of Exelon/PSEG and FPL/Constellation. When valuing companies in the context of these two proposed mergers, investment banks published their cost of capital estimates for the four PJM companies involved in the transactions.

The cost of capital is a weighted average of two figures: the company’s cost of debt (interest payments on borrowed funds) and the cost of equity (the return to shareholders for corporations with similar characteristics, and therefore the level of return needed for investors to purchase stock.). The table below summarizes various estimates of the weighted average cost of capital for PSEG, Exelon, Constellation and FPL. These estimates of the cost of capital can be used to assess whether the earned return on invested capital exceeds the cost of capital.¹¹ If the ROIC exceeds the cost of capital, it is certain to exceed the estimated cost of equity embedded in the cost of capital. A company with a higher return on equity than the estimated cost of equity is providing a return to shareholders above investor expectations.

¹¹ For further information on the source of the investment bank data and analysis of the information in the context of the cost of equity capital, see the testimony of Edward Bodmer filed in two Illinois rate cases -- case 05-0597 and 06-0070 available on the Illinois Commerce Commission website, <http://www.icc.state.il.us>.

Cost of Capital Estimates		
Exelon/PSEG	Low	High
JPMorgan	5.25%	5.75%
Lehman Brothers	5.43%	6.43%
Morgan Stanley	5.50%	6.00%
Constellation/FPL		
Lehman Brothers/FPL	5.18%	6.18%
Lehman Brothers/Constellation	5.57%	6.57%
Morgan Stanley	6.00%	7.00%
Goldman Sachs	5.25%	7.25%
Median WACC	5.43%	6.43%

Weighted average cost of capital figures shown in the above table can be converted into cost of equity estimates through making assumptions with respect to incremental cost of debt and market-based capital structures. The cost of equity consistent with investment bank weighted average cost of capital presentations range from 7% to 8%.

Where data are available, profit statistics are computed for individual subsidiaries of each company, as well as for the consolidated corporate holding company. Commonly, there are separate subsidiaries for the regulated distribution company, and the entities holding generating assets selling power into PJM. Selected historic rate of return statistics for the generation subsidiaries are shown in the table below (the five year averages are for 2001-2005.) Further details of return by operating segment are included in the detailed write-ups.

	Return on Equity Adjusted		Return on Equity Unadjusted		Return on Invested Capital	
	5 Yr		5 Yr		5 Yr	
	2005	Average	2005	Average	2005	Average
Generation Subsidiaries						
Exelon Generation	27.0%	17.3%	31.3%	16.5%	8.4%	5.9%
Constellation Merchant	13.0%	13.9%	13.9%	9.8%	6.5%	6.3%
PSEG Power	5.9%	23.5%	7.0%	20.2%	6.9%	9.1%
PPL Power	11.2%	6.2%	11.2%	7.6%	7.4%	5.2%
Midwest Generation	8.5%	4.8%	12.3%	-38.1%	7.4%	2.9%
Mirant PJM	97.9%	14.5%	69.5%	6.1%	3.4%	6.8%
Reliant PJM	1.1%	3.6%	0.2%	0.2%	4.7%	2.0%
Transmission and Distribution						
ComEd (Exelon)	7.6%	14.6%	8.3%	11.1%	7.8%	10.1%
PECO (Exelon)	11.1%	10.4%	18.7%	18.8%	5.9%	5.5%
BG&E (Constellation)	11.4%	10.5%	11.0%	9.2%	7.3%	6.8%
PSE&G (PSEG)	11.7%	8.0%	15.3%	10.3%	7.6%	6.2%
PPL Utilities	11.2%	6.2%	11.2%	7.6%	7.4%	5.2%
Potomac Electric	15.7%	12.0%	15.7%	12.0%	9.8%	7.9%

This review of profitability and the economic returns demonstrates that with the exception of Allegheny, Core PJM companies and Minor PJM companies including PEPCO have earned more than the cost of equity component of their cost of capital. This is confirmed by comparing the adjusted rate of return on equity for the consolidated entities to the 7% to 8% cost of equity. Further, the rate of return on equity has been above the cost of capital for both the generation and the T&D segments. The rate of return on equity for merchant companies is distorted by wide swings in their capital structures implying that profitability is best gauged through analyzing the return on invested capital.

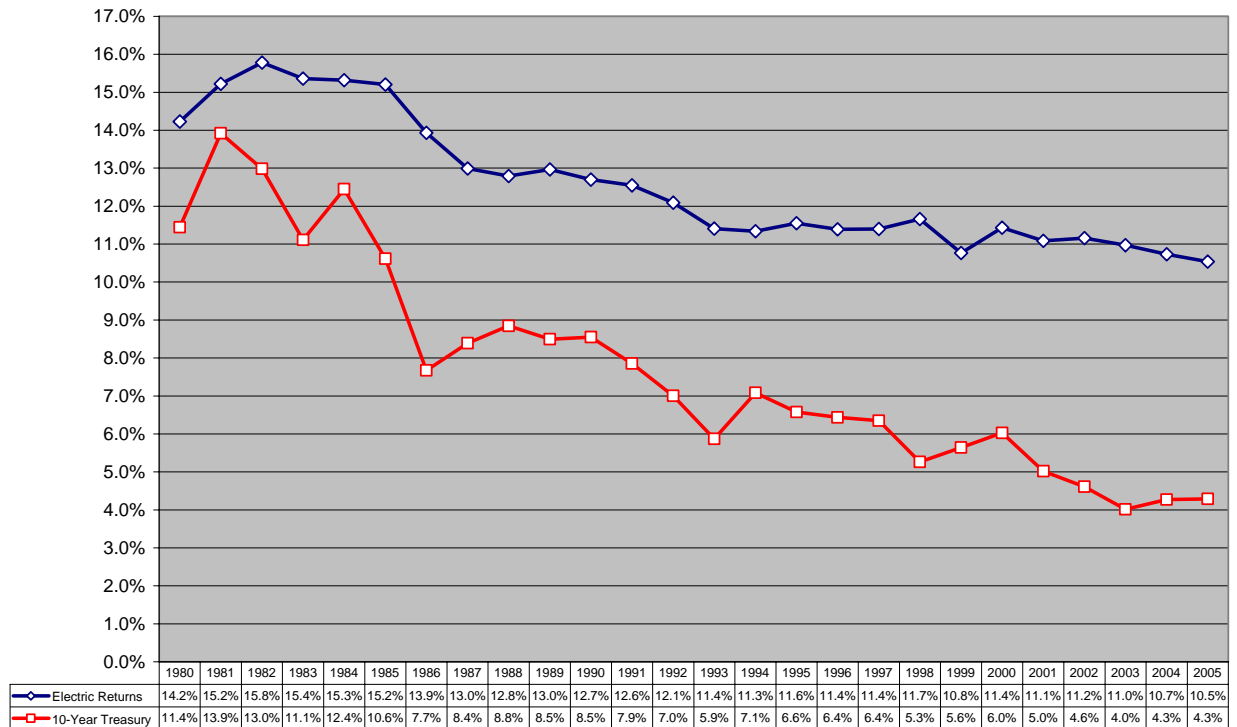
For companies that separately report earnings for generation operations in PJM, the financial performance of their generation-owning subsidiaries has been relatively stable. However, the merchant company performance has been negatively affected by high prices paid to purchase generating assets.

Rates of Return for Regulated Sample

Rates of return for PJM companies are compared to rates of return for companies in a sample of twenty regulated utility companies. In computing the rate of return calculation for regulated companies, the complications related to goodwill, write-offs, bankruptcy, capital structure changes and other factors generally do not arise. For the most part, these companies did not engage in business activities or change reporting in ways that cause the complications encountered in the analysis of the PJM companies. The earned rate of return for regulated companies is driven in large part by the allowed returns permitted by regulators. Those returns are illustrated on the graph below.¹²

¹² The source of this graph is testimony presented by Commonwealth Edison in its 2006 delivery services rate case. The data comes from the testimony of Samuel Hadaway.

Allowed Returns on Equity and Interest Rates



The table below shows available statistics for the regulated companies from Value Line. Earned returns have been in the 9.5% to 10.5% range and market to book ratios are well above 1.0.

		Price	BV/Share	Market to Book	Return on Common Equity					Projected	
					2001	2002	2003	2004	2005	Average	2006
Atmos	ATO	32.82	20.10	1.63	9.60%	10.40%	9.30%	7.60%	8.50%	9.08%	10.00%
Black Hills Corp	BKH	34.51	23.25	1.48	17.20%	11.90%	8.10%	7.80%	9.50%	10.90%	8.50%
Cascade Natl Gas	CGC	25.90	10.60	2.44	13.30%	10.90%	8.60%	11.20%	7.80%	10.36%	10.00%
CH Energy Group	CHG	52.85	32.65	1.62	10.20%	7.10%	9.10%	8.60%	8.80%	8.76%	8.00%
Cent Vemt PS	CV	21.12	17.75	1.19	5.80%	9.30%	8.10%	6.80%	0.50%	6.10%	8.50%
Energy East Corp	EAS	24.30	19.40	1.25	13.10%	8.00%	8.10%	9.00%	8.90%	9.42%	9.00%
Con Ed	ED	47.82	30.65	1.56	12.00%	11.30%	9.90%	7.80%	9.70%	10.14%	9.00%
Hawian Elec	HE	28.02	15.10	1.86	11.60%	11.30%	10.80%	8.90%	9.75%	10.47%	10.00%
Great Planes	GXP	31.84	16.30	1.95	12.60%	13.60%	16.40%	15.50%	13.30%	14.28%	9.00%
Keyspan Corp	KSE	40.90	26.30	1.56	8.20%	13.30%	11.40%	10.00%	8.90%	10.36%	9.00%
MGE Energy	MGEE	36.35	16.95	2.14	12.60%	12.80%	11.60%	10.00%	9.30%	11.26%	11.00%
Otter Tail Corp	OTTR	30.82	16.35	1.89	14.90%	14.50%	11.70%	9.10%	11.20%	12.28%	10.00%
Peoples Energy	PGL	44.30	21.85	2.03	13.90%	12.30%	12.30%	9.40%	10.80%	11.74%	5.20%
Puget Energy	PSD	23.88	18.35	1.30	7.70%	7.20%	7.00%	8.10%	7.20%	7.44%	7.50%
SCAN Corp	SCG	41.48	24.65	1.68	10.20%	11.60%	12.10%	12.20%	11.80%	11.58%	10.50%
Laclede	LG	36.70	18.85	1.95	10.50%	7.80%	11.60%	10.10%	10.90%	10.18%	12.50%
TECO Energy	TE	16.83	8.15	2.07	15.40%	9.90%		10.70%	13.30%	12.33%	15.50%
Vectren Corp	VVC	28.58	15.30	1.87	8.50%	13.10%	10.40%	9.90%	12.00%	10.78%	9.50%
WGL Holdings	WGL	33.41	18.25	1.83	11.20%	7.20%	14.00%	11.70%	12.00%	11.22%	9.50%
WPS Resources	WPS	53.62	35.95	1.49	10.80%	11.70%	9.10%	14.00%	11.80%	11.48%	10.50%
Average				1.74	11.47%	10.76%	10.51%	9.92%	9.80%	10.51%	9.64%
Median				1.75	11.40%	11.30%	10.40%	9.65%	9.73%	10.63%	9.50%

In recent years regulators have granted returns to companies far in excess of their cost of capital. This is evidenced by market to book ratios for the regulated sample that consistently exceed 1.0. (If the companies were municipally-owned, prices would be reduced such that a 1.0 market to book ratio is obtained because shareholders are ratepayers.) A basic premise of regulation is that if a company is expected to earn its cost of capital on a continuing basis, the market value will equal the book value. In his text, "The Cost of Capital" Seth Armitage states: "The ... aim of regulation implies that the market value of the company should be equal to the book value, at least immediately after a price-setting review If market value exceeds book value, it suggests that the actual rate of return exceeds the cost of capital, and vice versa."¹³

The market to book ratios that exceed 1.0 in the above table, the premium of granted rates of return to the Treasury Bond yields in the above graph, and investment bank cost of capital estimates discussed previously all suggest that the rates of return for regulated companies overstate their cost of capital. This implies that for purposes of comparison, one should use a rate of return in the range of 7% to 8% for evaluation of PJM companies' financial performance relative to regulated companies.

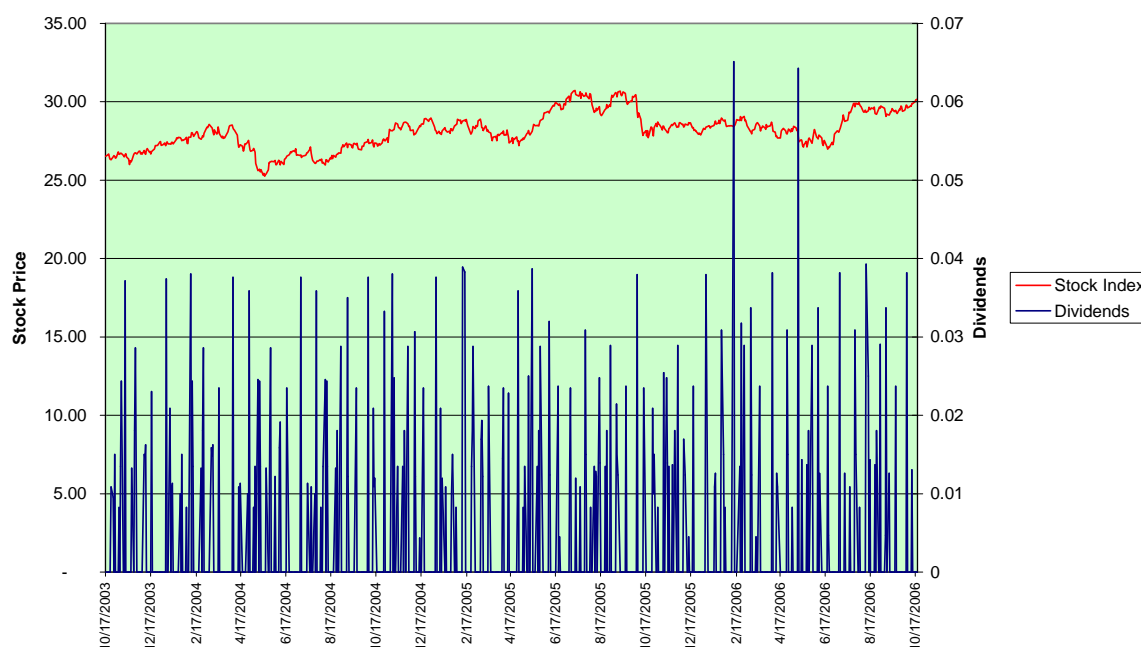
A second means of comparing the financial performance of PJM Companies with Regulated Companies was to compare the shareholders returns. To make this comparison, a hypothetical portfolio was first constructed. This approach assumes that investors own every stock in the regulated sample, with each company having an equal weight in the portfolio. Financial performance of this portfolio was then compared to the various PJM companies. Stock price and dividends for the regulated portfolio over the past five years are shown in the graph below. The line on this graph is the average of the stock prices, adjusted for stock splits. Dividends shown on the graph represent an equal percent of the per share dividends from each company on the date the dividends were paid. The internal rate of return ("IRR") percentage is the annual rate of return that an investor would earn through buying the portfolio at the first date on the graph – October of 2003 – then receiving dividends in the meantime and selling the portfolio three years later in October of 2006.

¹³ Armitage, S., 2005, p. 324.



Regulated Portfolio From: 17-October-03

Stock Price and Dividends
IRR over holding period 9.2%



Prospective Rate of Return

The prospective return on equity is computed by dividing estimates of future earnings per share by extrapolation of adjusted book value per share. This calculation is made for Core PJM companies and some of the other firms reviewed. Earnings estimates used in the numerator of the calculation are derived from various sources including (1) earnings guidance provided by company management; (2) earnings per share projections made by Value Line; and (3) earnings projections from investment analysts reported by Yahoo!.Finance.com. Since varying estimates of future earnings are made and alternative methods of projecting book value per share are reasonable, we have computed high and low case prospective returns on equity. Ranges in prospective returns on equity for Core PJM companies are summarized in the table below. As discussed in the company profiles, many of financial analysts project increased earnings for these companies as a result of the ending of rate caps that will allow companies to raise prices and the higher projected capacity prices.

		Return on Equity Adjusted	
		Base Case	Low Case
Year			
Core PJM Companies			
Exelon	2008	22.0%	21.5%
Constellation Energy	2008	17.5%	15.5%
PSEG	2009	22.1%	18.6%
PPL	2010	23.4%	21.7%
Allegheny	2010	26.2%	22.2%

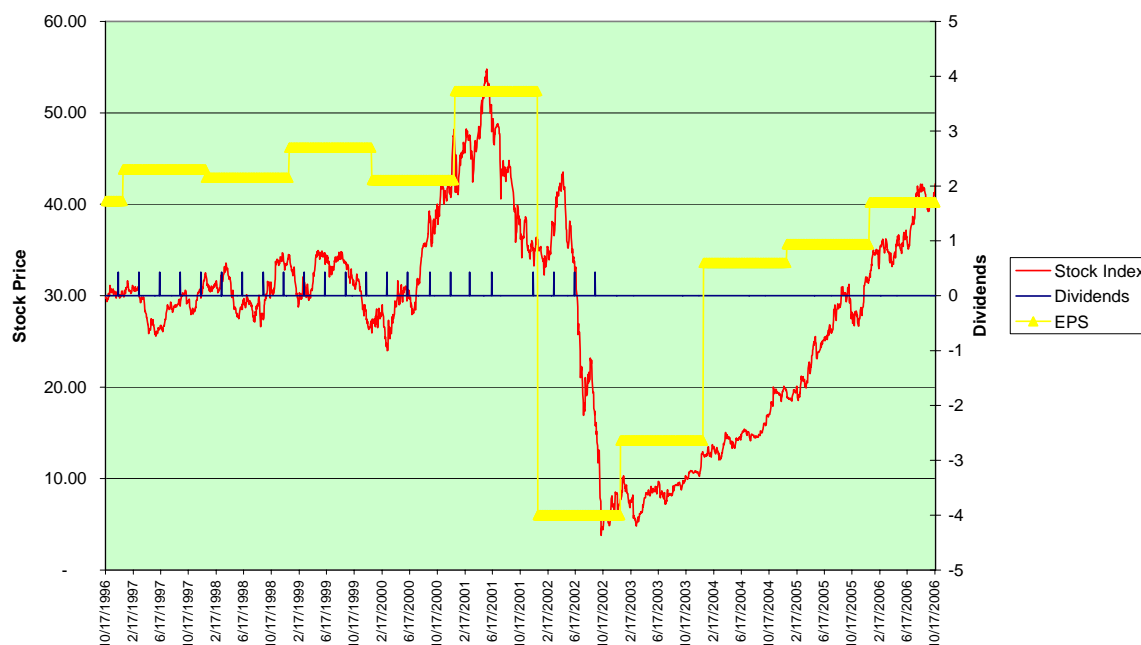
Holding Period Rates of Return

Investors ultimately care about the cash that goes into their pockets, not return on investment figures computed from accounting information. Holding period returns that measure the total amount realized by investors are (a) superior to the return on investment measures as a matter of theory and (b) incorporate both historic performance and investors' expectations of future returns. Computation of holding period returns includes adjustments for stock splits and the timing of dividends, but does not require modification for write-offs, goodwill or other accounting adjustments. However, the assumed start and end dates for the holding period greatly influences the holding period return measurement.

To illustrate the influence of the assumed period on the measurement of holding period returns, consider the cases of Edison International, Allegheny Energy and AES Energy. Edison International experienced a precipitous decline in share price when its subsidiary Southern California Edison had to incur very high purchased power costs during the California crisis. Indeed, the other large utility company in California – PG&E --- declared bankruptcy. After the California power crisis, Edison International's finances recovered. If one assumes a holding period that begins before the 2000-2001 California power crisis, the measured holding period returns will be much lower than if the assumed holding period begins after the crisis in 2001. Similar issues are present for Allegheny Energy, which almost went bankrupt after purchasing the electricity trading operations of Merrill Lynch for \$489 million and then losing money in the venture. The dramatic changes in Allegheny's stock price which drives its holding period return since 1996 is shown along with annual earnings on the graph below (AYE is the ticker symbol for Allegheny.)



AYE From: 17-October-96
Stock Price and Dividends
IRR over holding period 6.9%



Given the significant effect of timing assumptions, holding period returns are computed for various time periods. Holding period returns over the three years since 2003 probably provide the most effective indication of the expected profit from the expiration of rate caps and the restructuring of wholesale markets. Longer time periods are less effective in providing a realistic profit picture because many of the PJM Companies were involved in unprofitable trading operations that negatively affected stock prices before 2001. The stock prices were also influenced by the bull markets and “irrational exuberance” present in the late 1990’s.

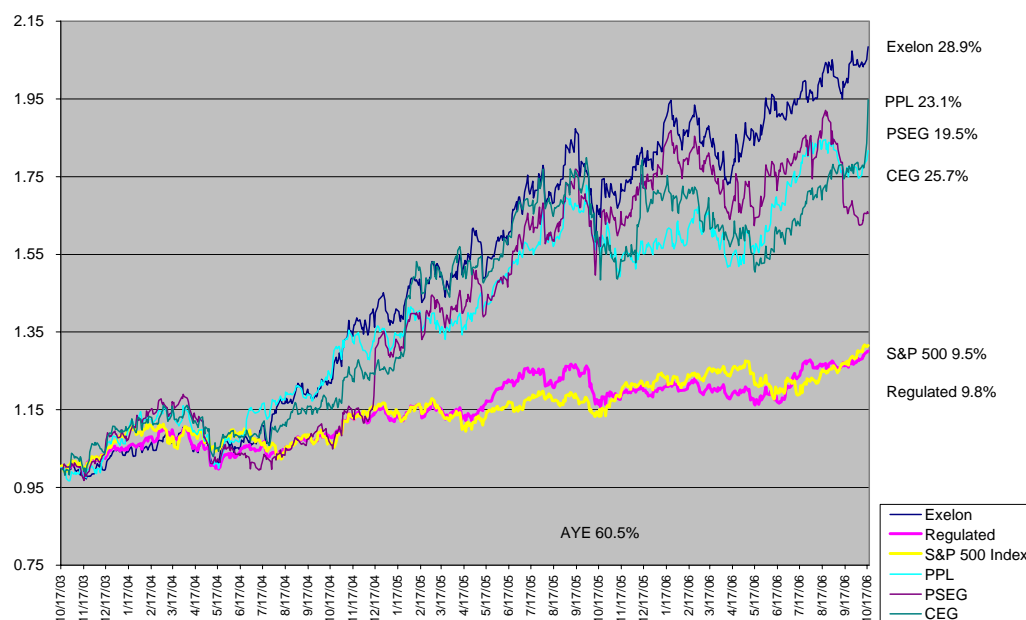
The longer term holding periods include the effects of stranded investment and non-PJM activities such as trading operations. For example, in the case of Constellation Energy several events, including termination of a business services contract with Goldman Sachs, asset write-downs, and loss on sale of non-PJM assets caused a decline in stock prices in 2000-2001. Shorter-term holding periods, such as the three-year period, are more influenced by the effects of increased PJM energy prices, prospective changes in capacity prices, and the expiration of rate caps. In the case of Constellation, its stock prices have steadily increased since 2002 and the annual return has been above 21% since the beginning of 2002.

The returns to PJM companies are shown in the two graphs below computed for a 3-year and 10-year holding period.

17-Oct-03



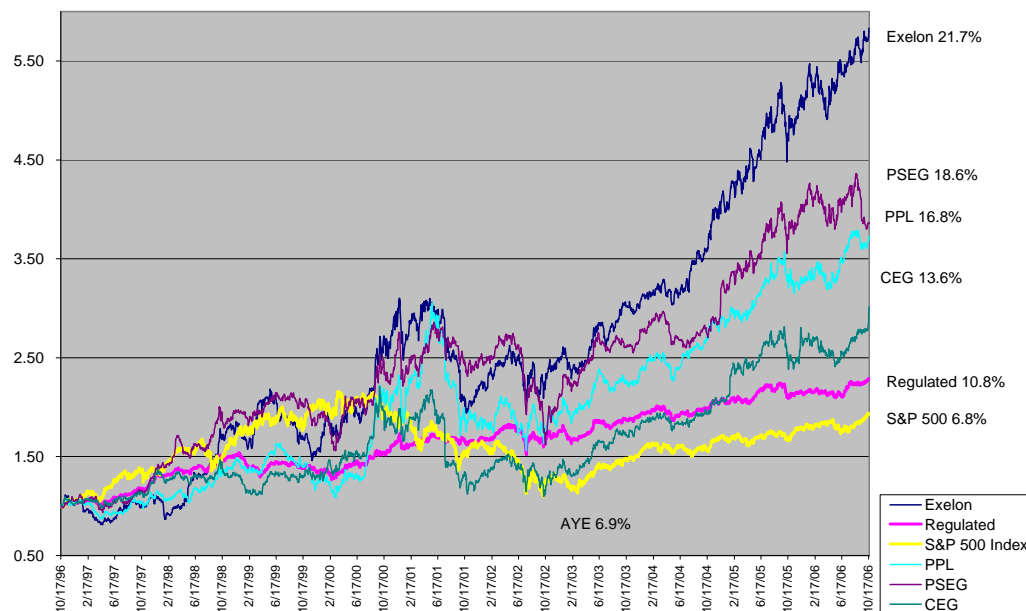
PJM Core Company Stock Indices Since 17-October-03



17-Oct-96



PJM Core Company Stock Indices Since 17-October-96



Holding period returns for alternative periods are summarized in the table for the PJM Companies, the regulated portfolio, and the overall stock market as measured by the S&P 500 index. (The returns shown on the table are the annual internal rate of return realized for various periods from October 2006 backwards.)

Summary of Holding Period Returns				
	10-Year	5-Year	3-Year	1-Year
Regulated Portfolio	10.30%	9.00%	9.20%	12.00%
Standard and Poor's 500	6.80%	4.90%	9.50%	14.80%
Core PJM				
Exelon	21.70%	27.10%	29.80%	25.90%
Constellation Energy	12.70%	22.10%	19.80%	11.40%
PSEG	18.60%	12.50%	19.50%	4.10%
PPL	16.80%	18.00%	23.10%	14.50%
Allegheny	6.90%	2.90%	60.00%	49.20%
Minor PJM				
AES	13.10%	7.90%	38.50%	35.80%
Dominion	16.60%	9.70%	12.70%	4.20%
FPL	11.70%	16.40%	18.60%	10.10%
Edison International	11.60%	25.50%	55.90%	0.40%
PEPCO	5.50%	8.10%	17.30%	22.70%

Over a three year holding period all of the PJM Companies experienced a holding period return far above the regulated portfolio sample and the S&P 500.

Aggregate Net Benefits to Investors from Restructuring

This section presents an analysis of the profit measures that addresses some of the policy issues raised in the study. Statistics on the historic and prospective return on equity and the holding period returns for PJM Companies and for regulated companies are used to quantify the dollar magnitude of benefits received by investors from retail and wholesale restructuring. The investor benefits are quantified using the following approaches:

- Holding period returns for Core PJM Companies
- Prospective return on equity for Core PJM Companies
- Historic return on equity for companies with distribution operations in PJM
- Market to book ratios for PJM Companies versus Regulated
- Cumulative dollar transfers to shareholders of T&D companies and merchant companies from divestiture transactions

Dollar Benefits Measured from Shareholder Holding Period Returns

The holding period returns realized by shareholders can be translated to dollar amounts through multiplying the percent return by the market value of all shares outstanding at the beginning of the period. Aggregate benefits received by investors in Core PJM Companies are shown in the table below. (Companies other than the Core PJM Companies are not reviewed in this analysis because of the dominant influence of non-PJM activities and because of the unavailability of stock prices for merchant companies). Separate analyses are made for 10-year returns, 5-year returns and 3-year returns in the three tables below.

The dollar amounts realized by investors shown in the table include Regulated Companies earnings above their cost of capital and Allegheny's losses related to trading activities. The measurements for Exelon are from the PECO perspective rather than from the ComEd/Unicom perspective. Had the ComEd/Unicom perspective been used, return in the ten-year holding period table for Exelon would imply a dollar transfer of almost \$32 billion for Exelon alone. Despite these factors, the apparent super-normal profits generated by Core PJM companies are between \$32 billion and \$40 billion.

Implied Transfers to Shareholders From Three-Year Holding Period Returns										
	Number of Shares	Stock Price	Market Capital	Holding Period	Holding Period Return	Start Market Capital	Accum Dollar Return	Reg Return	Accum Dollar Regulated	Surplus Value Realized
Exelon	657	61.89	40,661.73	3	29.80%	18,593.53	22,068.20	9.20%	24,211.9	16,449.78
Constellation	178	70.02	12,484.57	3	19.80%	7,261.11	5,223.46	9.20%	9,455.2	3,029.36
PSEG	251	66.38	16,661.38	3	19.50%	9,763.54	6,897.84	9.20%	12,713.8	3,947.59
PPL	380	34.06	12,947.91	3	23.10%	6,941.05	6,006.85	9.20%	9,038.4	3,909.47
Alleghney	165	42.24	6,956.51	3	60.00%	1,698.37	5,258.14	9.20%	2,211.6	4,744.94
Total										32,081.15

Implied Transfers to Shareholders From Five-Year Holding Period Returns										
	Number of Shares	Stock Price	Market Capital	Holding Period	Holding Period Return	Start Market Capital	Accum Dollar Return	Reg Return	Accum Dollar Regulated	Surplus Value Realized
Exelon	657	61.89	40,661.73	5	27.10%	12,259.09	28,402.64	9.00%	18,862.1	21,799.61
Constellation	178	70.02	12,484.57	5	22.10%	4,600.40	7,884.17	9.00%	7,078.3	5,406.29
PSEG	251	66.38	16,661.38	5	12.50%	9,245.88	7,415.50	9.00%	14,225.9	2,435.44
PPL	380	34.06	12,947.91	5	18.00%	5,659.65	7,288.26	9.00%	8,708.1	4,239.84
Alleghney	165	42.24	6,956.51	5	2.90%	6,029.96	926.55	9.00%	9,277.8	(2,321.33)
Total										31,559.84

Implied Transfers to Shareholders From Ten-Year Holding Period Returns										
	Number of Shares	Stock Price	Market Capital	Holding Period	Holding Period Return	Start Market Capital	Accum Dollar Return	Reg Return	Accum Dollar Regulated	Surplus Value Realized
Exelon	657	61.89	40,661.73	10	21.70%	5,705.32	34,956.4	10.30%	15,206.7	25,455.02
Constellation	178	70.02	12,484.57	10	12.70%	3,776.89	8,707.7	10.30%	10,066.8	2,417.81
PSEG	251	66.38	16,661.38	10	18.60%	3,025.97	13,635.4	10.30%	8,065.3	8,596.10
PPL	380	34.06	12,947.91	10	16.80%	2,740.13	10,207.8	10.30%	7,303.4	5,644.49
Alleghney	165	42.24	6,956.51	10	6.90%	3,569.56	3,387.0	10.30%	9,514.1	(2,557.63)
Total										39,555.80

Dollar Benefits Measured by Prospective Return on Equity

A second way to quantify the dollar amount of net benefits to investors is to compare the return on equity for PJM Companies and Regulated Companies. The fundamental notion underlying rate of return regulation is that economic profits are not being transferred to investors from ratepayers or vice-versa when the return on equity equals the cost of equity capital. Even though prices are not regulated for PJM companies, the economics behind the principle of comparing rate of return to the cost of capital to measure shareholder benefits still applies.

The dollar amount of prospective investor benefits can be computed by multiplying the expected future equity base by the difference in return on equity between the PJM Companies and the Regulated Companies sample. The difference in rate of return on equity multiplied by

the equity base provides a single year effect. To estimate a cumulative effect, the final column of the table below measures the present value of the benefits assuming the return differentials are sustained for 10-years.

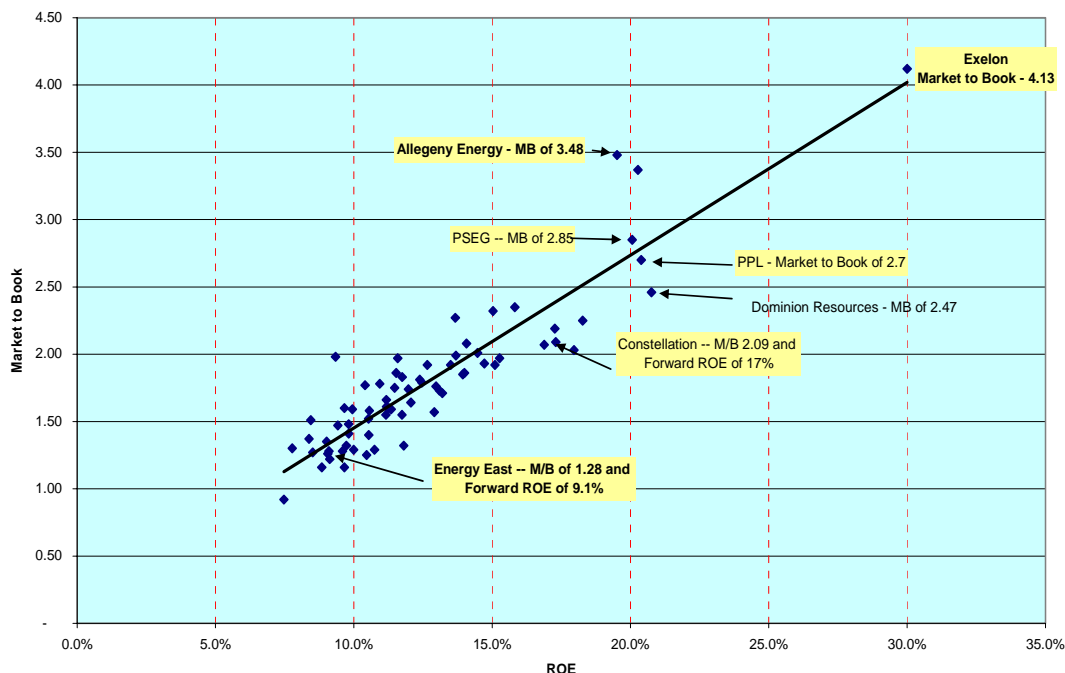
The table below includes rates of return on equity for the Regulated Company sample that exceed these companies' cost of capital (which, was in the 10-11% range, on average). If 7.75% were used in the above table as the benchmark, then the implied benefit would be \$33 billion rather than \$27 billion.

Annual Dollar Amounts and 10-Year Capitalized Amounts from PJM Core Company ROE versus Regulated ROE									
	Year	Return on Equity Adjusted		Prospective Adjusted Book Equity	Regulated Return on Equity in 2006	Surplus ROE Earned by PJM Co's	Surplus Dollar Earned	Capitalization Rate for Ten Years	Dollar Value over Ten Years
		Base Case	Low Case						
		Core PJM Companies							
Exelon	2008	22.0%	21.5%	13,593	9.64%	12.1%	1,648.11	6.24	10,287.68
Constellation Energy	2008	21.7%	17.8%	5,284	9.64%	10.1%	535.11	6.24	3,340.19
PSEG	2009	22.1%	18.6%	7,950	9.64%	10.7%	851.15	6.24	5,312.98
PPL	2010	23.4%	21.7%	6,354	9.64%	12.9%	820.88	6.24	5,124.00
Allegheny	2010	26.2%	22.2%	3,014	9.64%	14.6%	440.00	6.24	2,746.55
Total							4,295.25		26,811.40

Dollar Benefits from Analysis of Market to Book Ratios

An alternative way to compute the shareholder benefits from PJM restructuring is to evaluate the market to book ratio for PJM companies compared to market to book ratios implied by returns equal to the cost of capital. Market to book ratios and forward returns on equity, obtained from the Yahoo website, are shown for the utility industry on the chart below. The market to book ratio is taken directly from the reported balance sheet and share price data and therefore does not include any adjustments for goodwill, write-offs or other factors. Returns on equity are computed from forward earnings per share estimates on the Yahoo website and from forward book value per share calculations driven by projected dividends per share. The graph demonstrates that PJM companies are clustered among the highest market to book ratios and the highest returns in the industry.

Market to Book Ratio for Sample: All Utilities



The aggregate benefits to investors implied from market to book ratios can be computed from multiplying the excess market to book ratio by the book value of equity. This analysis is shown for Core PJM companies in the table below. The table uses book values per share adjusted per the discussion above and the average market to book value for regulated companies as a benchmark for determining the surplus value. This methodology produces an estimated benefit of more than \$30 billion.

Value Received by Shareholders as Measured using Market to Book Ratio									
	Shares	Adjusted Book Equity	BV/Share Adjusted	BV/Share Unadjusted	Share Price at 12/31/2006	Unregulated Market to Book Ratio	Regulated Market to Book	Market to Book Difference	Excess Value to Unregulated (\$ Millions)
Core PJM Companies									
Exelon	657.00	11,485	17.48	13.89	61.89	3.54	1.75	1.80	20,619.82
Constellation Energy	178.30	5,284	29.63	27.57	70.02	2.36	1.75	0.62	3,263.76
PSEG	251.00	7,950	31.67	23.98	66.38	2.10	1.75	0.35	2,787.36
PPL	380.15	6,354	16.71	11.62	34.06	2.04	1.75	0.29	1,860.07
Allegheny	164.69	3,014	18.30	10.34	42.24	2.31	1.75	0.56	1,696.41
Total									30,227.42

The market to book ratio of 1.75 for Regulated Companies means that investors in Regulated Companies have realized returns above their cost of capital. A more theoretically valid comparison is to use a 1.0 market to book ratio as the basis for computing excess value. If an investment earns exactly its cost of capital, then the present market value of the investment will be just equal to the original amount of equity investment recorded on the balance sheet, or the book value. (In the case of a regulated utility company, the rate base approximates the investment in debt and equity.) Therefore, if the return on equity is set exactly equal to the cost of equity for a utility company, the market to book value will be approximately 1.0. Using a market to book ratio of 1.0 implies a benefit of almost \$56 billion as shown in the table below.

Value Received by Shareholders as Measured using Market to Book Ratio									
	Shares in millions	Adjusted Book Equity	BV/Share Adjusted	BV/Share Unadjusted	Share Price at 12/31/2006	Unregulated Market to Book Ratio	Theoretical Market to Book Value	Market to Book Difference	Excess Value to Un- regulated (\$ Millions)
Core PJM Companies									
Exelon	657.00	11,485	17.48	13.89	61.89	3.54	1.00	2.54	29,176.90
Constellation Energy	178.30	5,284	29.63	27.57	70.02	2.36	1.00	1.36	7,200.67
PSEG	251.00	7,950	31.67	23.98	66.38	2.10	1.00	1.10	8,711.00
PPL	380.15	6,354	16.71	11.62	34.06	2.04	1.00	1.04	6,594.12
Allegheny	164.69	3,014	18.30	10.34	42.24	2.31	1.00	1.31	3,942.26
Total									55,624.94

Benefits from Generation Plant Divestitures

Evaluating benefits to shareholders where capacity was sold to merchant companies is more complex than the analysis for Core PJM companies who have retained their generating plants. Where capacity is now owned by merchant companies, three parties rather than two must be evaluated to compute net costs and benefits: (1) consumers; (2) investors in the company who originally owned the capacity, and; (3) investors in the merchant company. For example, it is conceivable that investors in a merchant company lost money on their investment, and investors in the company that sold the capacity benefited.

The analysis of divestiture transactions that created the PJM merchant companies demonstrates that these companies have a strategy of earning low returns in the initial transition period and increasing their earnings once bilateral contracts expire. The combination of paying prices above book value and signing fixed price contracts would not result in the companies earning their cost of capital as shown in the table below. Unless the merchant companies were simply squandering money invested by their shareholders, they logically expected market conditions would lead to increased returns once the fixed price contracts expired. The ultimate outcome of this analysis cannot yet be analyzed from available financial data.

Gains to Sellers and Returns to Buyers in PJM Plant Sale Transactions								
Seller	Buyer	Date	Total Proceeds (\$ Millions)	Capacity MW	Sale price per/kW	Seller Gain (\$ Millions)	Buyer Recent ROIC	Buyer Average ROIC
PEPCO	Mirant	2000	\$ 2,740.0	5,154	\$ 531.63	\$ 453	3.4%	6.8%
ComEd	Midwest without Collins	1999	\$ 4,900.0	5,876	\$ 833.90	\$ 2,587	7.4%	2.9%
ComEd	Midwest with Collins	1999	\$ 4,900.0	9,772	\$ 501.43	\$ 2,587	7.4%	2.9%
GPU/Sithe	Reliant	2000	\$ 2,100.0	4,979	\$ 421.77	\$ 400	4.7%	2.0%

Outline of Subsequent Sections

The remainder of this report includes an Appendix and company specific analyses that document the financial analysis for each company. The Appendix includes a description of the theory and mechanics behind computing each financial ratio along with the advantages and disadvantages of using the measures to evaluate PJM restructuring issues. Each company description includes sections that (1) summarize the analysis; (2) describe the history and corporate structure; (3) show the PJM generating capacity; (4) document computation of the

historic financial ratios; and (5) present the holding period return analysis. For the Core PJM companies, an additional section is included which describes the prospective returns.

Appendix

This appendix documents the data sources, formulas and theory for different measures of profit used to evaluate restructuring issues in PJM. The rate of return statistics explained below include:

- Unadjusted return on equity from financial statements
- Adjusted return on equity
- Return on invested capital
- Holding period return
- Prospective return on equity
- Cash flow returns

For each rate of return statistic, the mechanics of computing the ratio are described followed by a review of the advantages and the disadvantages of using the measure in the context of evaluating PJM restructuring. Before discussing the details of the individual profit measures, we describe a couple of general topics applicable to all of the profit measures. These subjects include data sources for computing the profitability ratios and the theory behind using alternative approaches.

The Theory Behind Using Alternative Financial Measures

The general idea of computing financial returns is to evaluate the returns earned by investors in a particular company relative to investments in other firms and relative to risks of the investment. In this study it is of particular interest to compare returns earned by investors from selling generation into PJM with returns earned by other utility companies that have remained regulated. A key issue in this analysis is how to use financial data so as to isolate restructuring issues from non-PJM activities engaged by each company.

Ultimately, investors are concerned only with the cash flow received from an investment relative to the amount of investment made. For example, if a \$100 cash investment is made and the investment yields a cash outflow of \$110 in one year's time, the rate of return is 10%. If the 10% return is greater than 5% return earned on another similar investment, the profit performance of the company earning 10% is obviously better. The cash flow return from this simple example is not captured in real world financial analysis for a number of reasons, including:

- investments do not occur at a specific date and the timing of investments can dramatically affect the measured rate of return;
- cash flow received by an investment comes in the form of both dividends and capital gains rather than a single lump sum payment;
- earnings, which represent the increase in value to shareholders from holding an investment, are not cash flow.

To consider theoretical issues associated with measuring return, begin with a case in which there with no depreciation and net income is all cash. In this case, the return on equity correctly reflects the weighted average of return to investment as a function of the time the investment was made. The equity balance measures the investment made by equity holders because it is computed using the following:

- Opening Equity Balance
- Plus: Increase in Balance from income
- Less: Dividends Paid
- Plus: New Equity Issues
- Equals: Closing Equity Balance

If all income were paid in dividends, then the equity balance would directly reflect new equity issues made by investors. When dividends are less than income, then amount retained can be considered incremental investment. If economic depreciation is used, the example below illustrates how return on equity correctly measures the true economic rate of return on projects in which the company has invested. Further, the example illustrates how return on equity accounts for the retention of earnings in a firm.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Revenues		200	404	612	824	1,041	1,262	1,487	1,717	1,951	2,190	2,234	2,278	2,324	2,112	1,895
Depreciation		49	106	173	252	343	449	572	714	879	1,071	1,092	1,114	1,136	1,096	1,045
Income		151	298	439	573	698	813	915	1,002	1,072	1,119	1,142	1,164	1,188	1,016	851
Capital Expenditures	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	1,243	1,268	-	-	-
Cash Flow																
Income	-	151	298	439	573	698	813	915	1,002	1,072	1,119	1,142	1,164	1,188	1,016	851
Plus: Depreciation	-	49	106	173	252	343	449	572	714	879	1,071	1,092	1,114	1,136	1,096	1,045
Less: Capital Expenditures	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	1,243	1,268	-	-	-
Less: Dividends	-	75	149	219	286	349	407	458	501	536	560	571	582	594	508	425
Net Cash Flow	(1,000)	(895)	(785)	(668)	(544)	(412)	(271)	(119)	44	220	411	420	428	1,730	1,604	1,470
Equity Balance																
Opening Balance	-	1,000	1,971	2,905	3,793	4,623	5,385	6,062	6,639	7,097	7,413	7,561	7,712	7,866	6,730	5,635
Add: Net Income	-	151	298	439	573	698	813	915	1,002	1,072	1,119	1,142	1,164	1,188	1,016	851
Less: Dividends	-	75	149	219	286	349	407	458	501	536	560	571	582	594	508	425
Add: Equity Contribution	1,000	895	785	668	544	412	271	119	(44)	(220)	(411)	(420)	(428)	(1,730)	(1,604)	(1,470)
Add: Accumulated Other Comprehensive Income																
Closing Balance	1,000	1,971	2,905	3,793	4,623	5,385	6,062	6,639	7,097	7,413	7,561	7,712	7,866	6,730	5,635	4,590
Equity in Denominator	1,000	1,971	2,905	3,793	4,623	5,385	6,062	6,639	7,097	7,413	7,561	7,712	7,866	6,730	5,635	
Return on Equity		15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%
Equity Cash Flow	(1,000)	(820)	(636)	(449)	(258)	(63)	135	338	545	756	971	990	1,010	2,324	2,112	1,895
Economic Rate of Return		15.10%														
PV Factor for Equity Weighting	1.00	0.87	0.75	0.66	0.57	0.50	0.43	0.37	0.32	0.28	0.25	0.21	0.18	0.16	0.14	
PV of Equity	1,000.0	1,712.4	2,192.8	2,487.4	2,634.4	2,665.8	2,607.5	2,481.1	2,304.2	2,091.0	1,853.0	1,642.2	1,455.3	1,081.7	786.8	
Sum of PV of Equity	30,463.1															
Weighted Equity Balance	3.28%	5.62%	7.20%	8.17%	8.65%	8.75%	8.56%	8.14%	7.56%	6.86%	6.08%	5.39%	4.78%	3.55%	2.58%	
Weighted Average ROE		15.10%														

If a company invests in a portfolio of different projects with different returns, the annual rate of return changes from year, but the weighted average rate of return where weights reflect the present value of equity at the overall rate of return is equal to the internal rate of return. A scenario with a multitude of different projects is shown in the following example.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Revenues		200	404	643	901	1,187	1,498	1,823	2,197	2,628	2,501	2,390	2,890	3,450	3,820	3,175
Depreciation		49	109	156	279	358	480	628	809	1,029	999	834	1,118	1,461	1,761	1,554
Income		151	295	487	621	830	1,018	1,195	1,389	1,599	1,501	1,556	1,772	1,989	2,059	1,621
Capital Expenditures	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	1,243	1,268	-	-	-
Cash Flow																
Income	-	151	295	487	621	830	1,018	1,195	1,389	1,599	1,501	1,556	1,772	1,989	2,059	1,621
Plus: Depreciation	-	49	109	156	279	358	480	628	809	1,029	999	834	1,118	1,461	1,761	1,554
Less: Capital Expenditures	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	1,243	1,268	-	-	-
Less: Dividends	-	75	147	243	311	415	509	598	694	800	751	778	886	995	1,029	810
Net Cash Flow	(1,000)	(895)	(784)	(662)	(493)	(332)	(137)	77	331	634	531	369	736	2,456	2,791	2,364
Equity Balance																
Opening Balance	-	1,000	1,971	2,902	3,807	4,611	5,357	6,004	6,525	6,888	7,053	7,273	7,683	7,833	6,372	4,611
Add: Net Income	-	151	295	487	621	830	1,018	1,195	1,389	1,599	1,501	1,556	1,772	1,989	2,059	1,621
Less: Dividends	-	75	147	243	311	415	509	598	694	800	751	778	886	995	1,029	810
Add: Equity Contribution	1,000	895	784	662	493	332	137	(77)	(331)	(634)	(531)	(369)	(736)	(2,456)	(2,791)	(2,364)
Add: Accumulated Other Comprehensive Income																
Closing Balance	1,000	1,971	2,902	3,807	4,611	5,357	6,004	6,525	6,888	7,053	7,273	7,683	7,833	6,372	4,611	3,057
Equity in Denominator		1,000	1,971	2,902	3,807	4,611	5,357	6,004	6,525	6,888	7,053	7,273	7,683	7,833	6,372	4,611
Return on Equity		15.1%	14.9%	16.8%	16.3%	18.0%	19.0%	19.9%	21.3%	23.2%	21.3%	21.4%	23.1%	25.4%	32.3%	35.2%
Equity Cash Flow	(1,000)	(820)	(636)	(419)	(182)	83	372	674	1,026	1,433	1,282	1,147	1,622	3,450	3,820	3,175
Economic Rate of Return		20.19%														
PV Factor for Equity Weighting		1.00	0.83	0.69	0.58	0.48	0.40	0.33	0.28	0.23	0.19	0.16	0.13	0.11	0.09	0.08
PV of Equity		1,000.0	1,639.8	2,008.7	2,192.6	2,209.1	2,135.5	1,991.1	1,800.3	1,581.2	1,347.2	1,155.8	1,015.7	861.6	583.1	351.0
Sum of PV of Equity		22,202.6														
Weighted Equity Balance		4.50%	7.39%	9.05%	9.88%	9.95%	9.62%	8.97%	8.11%	7.12%	6.07%	5.21%	4.57%	3.88%	2.63%	1.58%
Weighted Average ROE		20.19%														

There are many theoretical problems with the standard return on investment even if a company has stable earnings and uncomplicated accounting. When depreciation expense is computed on a straight line basis, when asset write-ups and write-offs occur and when other accounting adjustments are made which change the valuation of assets, the rate of return no longer can be used to compare the rate of return to investors between companies. In the example above, economic depreciation had to be computed for the return to correspond with the accounting return. If straight line depreciation is used rather than economic depreciation, the weighted return on equity no longer equals the economic return as shown on the table below

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Revenues		200	404	612	824	1,041	1,262	1,487	1,717	1,951	2,190	2,234	2,278	2,324	2,112	1,895
Depreciation		100	202	306	412	520	631	743	858	975	1,095	1,217	1,341	1,368	1,266	1,162
Income		100	202	306	412	520	631	743	858	975	1,095	1,017	937	956	846	733
Capital Expenditures	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	1,243	1,268	-	-	-
Cash Flow																
Income	-	100	202	306	412	520	631	743	858	975	1,095	1,017	937	956	846	733
Plus: Depreciation	-	100	202	306	412	520	631	743	858	975	1,095	1,217	1,341	1,368	1,266	1,162
Less: Capital Expenditures	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195	1,219	1,243	1,268	-	-	-
Less: Dividends	-	50	101	153	206	260	315	372	429	488	547	508	469	478	423	367
Net Cash Flow	(1,000)	(870)	(737)	(602)	(464)	(323)	(180)	(34)	116	268	423	482	542	1,846	1,689	1,529
Equity Balance																
Opening Balance	-	1,000	1,920	2,758	3,514	4,184	4,768	5,263	5,668	5,981	6,201	6,325	6,352	6,279	4,911	3,645
Add: Net Income	-	100	202	306	412	520	631	743	858	975	1,095	1,017	937	956	846	733
Less: Dividends	-	50	101	153	206	260	315	372	429	488	547	508	469	478	423	367
Add: Equity Contribution	1,000	870	737	602	464	323	180	34	(116)	(268)	(423)	(482)	(542)	(1,846)	(1,689)	(1,529)
Add: Accumulated Other Comprehensive Income																
Closing Balance	1,000	1,920	2,758	3,514	4,184	4,768	5,263	5,668	5,981	6,201	6,325	6,352	6,279	4,911	3,645	2,483
Equity in Denominator		1,000	1,920	2,758	3,514	4,184	4,768	5,263	5,668	5,981	6,201	6,325	6,352	6,279	4,911	3,645
Return on Equity		10.0%	10.5%	11.1%	11.7%	12.4%	13.2%	14.1%	15.1%	16.3%	17.7%	16.1%	14.8%	15.2%	17.2%	20.1%
Equity Cash Flow	(1,000)	(820)	(636)	(449)	(258)	(63)	135	338	545	756	971	990	1,010	2,324	2,112	1,895
Economic Rate of Return		15.10%														
PV Factor for Equity Weighting		1.00	0.87	0.75	0.66	0.57	0.50	0.43	0.37	0.32	0.28	0.25	0.21	0.18	0.16	0.14
PV of Equity		1,000.0	1,668.1	2,082.2	2,304.3	2,384.0	2,360.2	2,263.6	2,118.1	1,942.0	1,749.2	1,550.2	1,352.5	1,161.5	789.3	509.0
Sum of PV of Equity		25,294.7														
Weighted Equity Balance		3.95%	6.59%	8.23%	9.11%	9.42%	9.33%	8.95%	8.37%	7.68%	6.92%	6.13%	5.35%	4.59%	3.12%	2.01%
Weighted Average ROE		14.59%														

Problems with the use of accounting measures to measure the true return earned by investors has long been recognized by economists. For example, Fisher and McGowan state: “Many users of accounting rates of return seem well aware that profits to total assets or stockholders equity may not be consistent from firm to firm or industry to industry and may not correspond to the economists’ definition of profits. Accounting rates of return, even if properly and consistently measured, provide almost no information about the economic rates of return. Unless depreciation schedules are chosen in a particular way ... the accounting rate of return on a particular investment will not in general equal the economic rate of return on that investment in any year.”¹

Using return on investment to measure returns realized by investors who have put money into a company when assets are constructed or purchased is made more difficult because of accounting policies that re-value assets over time. Accounting methods change the value of investments related to derivatives, impairment, foreign currency translation and other factors. Some of these asset write-ups are not recognized on the income statement, but affect the equity balance through accumulated other comprehensive income described later in this appendix. For regulated companies, adjustments to the investment balance are less common because of the premise that the original cost of investments is used as the basis both for setting rates and valuing assets. The example below illustrates problems with measurement of return on equity when asset write-ups and write-downs change the common equity balance.

Data Sources

In analyzing the profit for each company:

- We retrieved SEC 10-K reports for a number of historic years and extracted financial statement and other data. After aggregating the data, we have used the financial statement information to compute a number of financial ratios. A spreadsheet with the financial statement data and the financial ratios was constructed for each company.
- We gathered historic daily stock price, dividend and stock split data. We entered the stock data into a spreadsheet for each company that allows us to construct rates of return earned by shareholders using alternative holding period assumptions.
- We acquired historic and projected data from Value Line and entered the data into a series of spreadsheets.
- We downloaded recent investor analyst presentations that often describe profit outlooks and make comments on prospective profitability from selling generation into PJM.

¹ Fisher, Franklin, and McGowan, John, “On the Misuse of Accounting Rates of Return to Infer Monopoly Profits”, The American Economic Review, March, 1983.

- We gathered prospective earnings estimated by financial analysts from Yahoofinance.com.

Return on Equity from Financial Statements

Mechanics

The traditional return on equity is computed from: net income after preferred dividends on the income statement; and the common equity amount on the balance sheet using the following formula.

$$\text{ROE} = \frac{\text{Net Income to Common Equity}}{\text{Average of Beginning and Ending Common Equity Balance}}$$

In the above formula, net income before cumulative accounting changes and before extraordinary income is used so that the return reflects on-going operations. The formula can also be computed if the numerator and denominator are divided by shares outstanding. Net income divided by the number of shares equals earnings per share and common equity divided by the number of shares provides the book value per share. This means the ROE can also be computed using the formula:

$$\text{ROE} = \frac{\text{Earnings Per Share}}{\text{Average of Beginning and Ending Book Value per Share}}$$

Advantages

The primary advantage of presenting the return on equity is its traditional use in the electric utility industry, including its dominant role in rate proceedings and its general use in measuring the economic performance of an investment. There is little judgment in making the calculation and it can often be made from data in the financial summary presented in the 10-K of each company. The return on equity can also be directly extracted from sources such as Value Line. (The Value Line return on equity is often not exactly the same as the unadjusted return on equity – for example, the net income used by Value Line excludes write-offs.)

Disadvantages

The return on equity contains theoretical flaws associated with all accounting ratios discussed above in that accounting returns do not measure true economic returns. In addition, the return on equity is affected by capital structure decisions of a company that change the risk to equity investors but have nothing to do with the underlying profit of real assets. For example, the return on equity may be increased from an increase in debt leverage even though nothing has changed in the way the company operates. However, increases in returns that come from greater leverage mean that the risk has

increased. Finally, the return on equity is a historic measure that does not enable the drawing of conclusions with respect to future market developments.

Another problem with measuring the return on equity is that the denominator of the equation is affected by write-offs. For example, if a company incurs a large loss from writing down assets, its equity balance may become very low. The low equity balance means that future returns on equity will be higher than they would be without the write-off. The write-off reduces the return in the write-off period and increases returns in subsequent periods. Similarly, the return on equity can be difficult to interpret after a company experiences losses and has a small amount of equity. An illustration of how write-offs affect the return on equity calculation is shown in the example below – the example is derived from the initial example with a single asset type.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Revenues		200	400	600	800	1,000	1,200	1,400	1,600	1,800	2,000	2,000	2,000	2,000	1,800	1,600
Depreciation		49	105	170	245	331	430	544	675	826	1,000	1,000	1,000	1,000	951	895
Write-off									4,000							
Reduced Depreciation from Write-off										800	800	800	800	800		
Income		151	295	430	555	669	770	856	(3,075)	1,774	1,800	1,800	1,800	1,800	849	705
Capital Expenditures	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	-	-	-
Cash Flow																
Income	-	151	295	430	555	669	770	856	(3,075)	1,774	1,800	1,800	1,800	1,800	849	705
Plus: Depreciation	-	49	105	170	245	331	430	544	4,675	26	200	200	200	200	951	895
Less: Capital Expenditures	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	-	-	-
Less: Dividends	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cash Flow	(1,000)	(800)	(600)	(400)	(200)	-	200	400	600	800	1,000	1,000	1,000	2,000	1,800	1,600
Equity Balance																
Opening Balance	-	1,000	1,951	2,846	3,675	4,430	5,099	5,669	6,125	2,449	3,423	4,223	5,023	5,823	5,623	4,672
Add: Net Income	-	151	295	430	555	669	770	856	(3,075)	1,774	1,800	1,800	1,800	1,800	849	705
Less: Dividends	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Add: Equity Contribution	1,000	800	600	400	200	-	(200)	(400)	(600)	(800)	(1,000)	(1,000)	(1,000)	(2,000)	(1,800)	(1,600)
Add: Accumulated Other Comprehensive Income																
Closing Balance	1,000	1,951	2,846	3,675	4,430	5,099	5,669	6,125	2,449	3,423	4,223	5,023	5,823	5,623	4,672	3,778
Equity in Denominator		1,000	1,951	2,846	3,675	4,430	5,099	5,669	6,125	2,449	3,423	4,223	5,023	5,823	5,623	4,672
Return on Equity		15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	-50.2%	72.4%	52.6%	42.6%	35.8%	30.9%	15.1%	15.1%
Equity Cash Flow	(1,000)	(800)	(600)	(400)	(200)	-	200	400	600	800	1,000	1,000	1,000	2,000	1,800	1,600
Economic Rate of Return	15.10%															
PV Factor for Equity Weighting	1.00	0.87	0.75	0.66	0.57	0.50	0.43	0.37	0.32	0.28	0.25	0.21	0.18	0.16	0.14	0.14
PV of Equity	1,000.0	1,695.1	2,148.0	2,410.3	2,524.3	2,524.3	2,438.2	2,288.8	795.3	965.6	1,035.0	1,069.6	1,077.3	903.8	652.5	
Sum of PV of Equity	24,724.1															
Weighted Equity Balance	4.04%	6.86%	8.69%	9.75%	10.21%	10.21%	9.86%	9.26%	3.22%	3.91%	4.19%	4.33%	4.36%	3.66%	2.64%	
Weighted Average ROE	15.10%															

Adjusted Return on Equity

Mechanics

The adjusted return on equity is computed through dividing net income (adjusted for goodwill impairment charges, write-offs and re-structuring charges) by equity (adjusted for goodwill, accumulated write-offs and accumulated other comprehensive income). The adjusted return on equity is demonstrated by the following formula:

$$\text{Adjusted ROE} = \frac{\text{Net Income less write-offs, adjusted depreciation, impairment}}{\text{Average of Adjusted Common Equity Balance}}$$

The adjustments to net income and to the equity balance are the same for each company so as to assure consistency in comparing results between companies. Once the adjustments are made, the returns for PJM companies can be reasonably compared to the

returns experienced by regulated companies. The adjustments and the rational for the adjustments to goodwill, write-offs, and accumulated other comprehensive income are described below:

Goodwill

Goodwill is recorded on the asset side of the balance sheet when an acquisition is made to account for paying more than the initial investment made by investors in the assets. With multiple acquisitions, the return on equity is not comparable between a company that is the subject of multiple mergers and a company that has not been involved in mergers and acquisitions even if operations are identical. In the ratemaking process, goodwill is not included in the basis for setting rates because rates should not increase by virtue of paying more than the original cost of the investment. To the extent that goodwill exists on the balance sheet, the equity balance is increased relative to the amount of equity that would exist if investments had been recorded at the original amount of the investment. The returns on equity allowed by regulators and cost of capital are set on the basis of assets that do not include goodwill. In the example below, a premium is paid for assets and the return on equity declines because of the added amounts paid for assets.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Revenues		200	400	600	800	1,000	1,200	1,200	1,200	1,200	1,200	1,000	800	600	400	200
Depreciation		49	105	170	245	331	430	495	570	656	755	669	570	456	325	174
Income		151	295	430	555	669	770	705	630	544	445	331	230	144	75	26
Capital Expenditures	1,000	1,000	1,000	3,000	1,000	1,000	-	-	-	-	-	-	-	-	-	-
Cash Flow																
Income	-	151	295	430	555	669	770	705	630	544	445	331	230	144	75	26
Plus: Depreciation	-	49	105	170	245	331	430	495	570	656	755	669	570	456	325	174
Less: Capital Expenditures	1,000	1,000	1,000	3,000	1,000	1,000	-	-	-	-	-	-	-	-	-	-
Less: Dividends	-	75	147	215	277	334	385	352	315	272	223	166	115	72	38	13
Net Cash Flow	(1,000)	(875)	(747)	(2,615)	(477)	(334)	815	848	885	928	977	834	685	528	362	187
Equity Balance																
Opening Balance	-	1,000	1,951	2,846	5,675	6,430	7,099	6,669	6,174	5,604	4,948	4,193	3,524	2,954	2,498	2,174
Add: Net Income	-	151	295	430	555	669	770	705	630	544	445	331	230	144	75	26
Less: Dividends	-	75	147	215	277	334	385	352	315	272	223	166	115	72	38	13
Add: Equity Contribution	1,000	875	747	2,615	477	334	(815)	(848)	(885)	(928)	(977)	(834)	(685)	(528)	(362)	(187)
Add: Accumulated Other Comprehensive Income																
Closing Balance	1,000	1,951	2,846	5,675	6,430	7,099	6,669	6,174	5,604	4,948	4,193	3,524	2,954	2,498	2,174	2,000
Equity in Denominator		1,000	1,951	2,846	5,675	6,430	7,099	6,669	6,174	5,604	4,948	4,193	3,524	2,954	2,498	2,174
Return on Equity		15.1%	15.1%	15.1%	9.8%	10.4%	10.8%	10.6%	10.2%	9.7%	9.0%	7.9%	6.5%	4.9%	3.0%	1.2%
Equity Cash Flow	(1,000)	(800)	(600)	(2,400)	(200)	-	1,200	1,200	1,200	1,200	1,200	1,000	800	600	400	200
Economic Rate of Return		8.42%														
PV Factor for Equity Weighting		1.00	0.92	0.85	0.78	0.72	0.67	0.62	0.57	0.52	0.48	0.45	0.41	0.38	0.35	0.32
PV of Equity		1,000.0	1,799.5	2,420.8	4,453.3	4,653.9	4,739.1	4,106.3	3,506.3	2,935.6	2,390.8	1,868.7	1,448.7	1,120.1	873.7	701.2
Sum of PV of Equity		41,667.2														
Weighted Equity Balance		2.40%	4.32%	5.81%	10.69%	11.17%	11.37%	9.85%	8.42%	7.05%	5.74%	4.48%	3.48%	2.69%	2.10%	1.68%
Weighted Average ROE		9.23%														

Write-offs

Some of the PJM companies wrote down their generating plants after re-structuring when they changed accounting methods and re-valued assets that could not be supported without regulatory support. These write-offs would not have occurred if the companies generation segment would have continued to be regulated. Large write-offs occurred for ComEd, PECO, PSEG and other companies. The difference between regulated accounting and non-regulated accounting is explained in the following statement in FPL's 10-K.

Management believes it is unlikely there will be any state actions to restructure the retail electric industry in Florida in the near future. If the basis of regulation for some or all of FPL's business changes from cost-based regulation, existing regulatory assets and liabilities would be written off unless regulators specify an alternative means of recovery or refund. Further, other aspects of the business, such as generation assets and long-term power purchase commitments, would need to be reviewed to assess their recoverability in a changed regulatory environment.

To make the return on investment comparable between PJM companies and regulated companies, the amount of write-off is added to the equity balance. Once the write-off (net of tax) is added back, the depreciation expense should also be adjusted because the depreciation expense would have been greater if the write-off did not occur.

Accumulated Other Comprehensive Income

PJM companies record some direct changes in their equity balance that are not reflected in the income statement. Results of increases or decreases in the equity balance are recorded as accumulated other comprehensive income. Items that cause accumulated other comprehensive income to increase or decrease include changes in the value of derivatives used to hedge cash flow, unrealized gains and losses on investments, and foreign translation adjustments. The manner in which changes in the value of derivatives are recorded on the balance sheet is explained in a 10-K report for one of the PJM companies as follows:

SFAS No. 133 requires us to record all derivatives on the balance sheet at fair value with changes in the fair value resulting from fluctuations in the underlying commodity prices immediately recognized in earnings, unless the derivative qualifies for hedge accounting treatment. Changes in the fair value of a derivative that is highly effective as, and is designated as and qualifies as a cash flow hedge, are deferred in accumulated other comprehensive income and are recognized into earnings as the hedged transactions occur.”

The accumulated other comprehensive income is generally minor or non-existent for regulated companies. Balances of accumulated other comprehensive income do not represent money directly put into a company by investors or indirectly by money invested from not paying income as dividends. As shown in the supplemental materials for Dominion, the company excludes accumulated other comprehensive income when it computes return on investment. The example below illustrates how accumulated other comprehensive income can affect the return on equity.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Revenues		200	400	600	800	1,000	1,200	1,200	1,200	1,200	1,200	1,000	800	600	400	200
Depreciation		49	105	170	245	331	430	495	570	656	755	669	570	456	325	174
Income		151	295	430	555	669	770	705	630	544	445	331	230	144	75	26
Capital Expenditures	1,000	1,000	1,000	1,000	1,000	1,000	-	-	-	-	-	-	-	-	-	-
Cash Flow																
Income	-	151	295	430	555	669	770	705	630	544	445	331	230	144	75	26
Plus: Depreciation	-	49	105	170	245	331	430	495	570	656	755	669	570	456	325	174
Less: Capital Expenditures	1,000	1,000	1,000	1,000	1,000	1,000	-	-	-	-	-	-	-	-	-	-
Less: Dividends	-	75	147	215	277	334	385	352	315	272	223	166	115	72	38	13
Net Cash Flow	(1,000)	(875)	(747)	(615)	(477)	(334)	815	848	885	928	977	834	685	528	362	187
Equity Balance																
Opening Balance	-	1,000	1,951	2,846	4,675	7,430	7,599	5,669	4,174	3,604	2,948	2,193	1,524	954	498	174
Add: Net Income	-	151	295	430	555	669	770	705	630	544	445	331	230	144	75	26
Less: Dividends	-	75	147	215	277	334	385	352	315	272	223	166	115	72	38	13
Add: Equity Contribution	1,000	875	747	615	477	334	(815)	(848)	(885)	(928)	(977)	(834)	(685)	(528)	(362)	(187)
Add: Accumulated Other Comprehensive Income	-	-	-	1,000	2,000	(500)	(1,500)	(1,000)	-	-	-	-	-	-	-	-
Closing Balance	1,000	1,951	2,846	4,675	7,430	7,599	5,669	4,174	3,604	2,948	2,193	1,524	954	498	174	0
Equity in Denominator		1,000	1,951	2,846	4,675	7,430	7,599	5,669	4,174	3,604	2,948	2,193	1,524	954	498	174
Return on Equity		15.1%	15.1%	15.1%	11.9%	9.0%	10.1%	12.4%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%	15.1%
Equity Cash Flow	(1,000)	(800)	(600)	(400)	(200)	-	1,200	1,200	1,200	1,200	1,200	1,000	800	600	400	200
Economic Rate of Return		15.10%														
PV Factor for Equity Weighting		1.00	0.87	0.75	0.66	0.57	0.50	0.43	0.37	0.32	0.28	0.25	0.21	0.18	0.16	0.14
PV of Equity		1,000.0	1,695.1	2,148.0	3,066.1	4,233.7	3,761.9	2,438.2	1,559.7	1,170.1	831.6	537.5	324.6	176.6	80.1	24.3
Sum of PV of Equity		23,047.3														
Weighted Equity Balance		4.34%	7.35%	9.32%	13.30%	18.37%	16.32%	10.58%	6.77%	5.08%	3.61%	2.33%	1.41%	0.77%	0.35%	0.11%
Weighted Average ROE		12.46%														

Income Adjustments

Income adjustments for computing the adjusted ROE include non-recurring items that would not reflect on-going operations. In setting rates using an administered return on equity, the process does not include write-offs for changes in accounting method, impairment of goodwill, losses from discontinued operations and other items.

Advantages

Advantages of the adjusted return on equity are that it makes the return on equity of PJM companies more comparable to regulated companies. Through measuring profit from on-going operations and removing goodwill, write-offs and accumulated other comprehensive income, the adjusted return on equity incorporates the investment made by original investors. As with the unadjusted return on equity, the return on equity is an intuitive ratio that can be compared to the return on equity granted to regulated companies. The historic adjusted return on equity is used assess whether PJM Companies have recovered their stranded investment.

Disadvantages

Disadvantages of the adjusted return on equity are that it is not a conventional measure computed by financial analysts and that it requires adjustments that are subject to some judgment. While the adjusted return on equity corrects some of the interpretation problems with the return on equity, the theoretical difficulties with measuring rate of return from historic financial statements are still present. Further, measurement problems that arise from distortions in the capital structure can distort the comparison of the adjusted return on equity among companies.

Return on Invested Capital

Mechanics

The return on invested capital is computed through dividing the operating income before financing charges by the total invested capital including both debt and equity. Income does not subtract debt servicing charges and invested capital includes both debt and equity. The operating income before financing charges is computed on an after tax basis and it excludes goodwill impairment charges, write-offs and other re-structuring charges. Computation of the return on invested capital is demonstrated by the following formula:

$$\text{ROIC} = \frac{\text{Net Operating Income After-Tax}}{\text{Average of Adjusted Invested Capital}}$$

The net operating income after tax is simply computed as the operating income multiplied by one minus the tax rate. For this study, net operating income does not include write-offs, goodwill impairments and other non-recurring items:

$$\text{NOPLAT} = \text{Net operating income} \times (1 - \text{tax rate})$$

Invested capital begins with adjusted common equity from the adjusted return on equity calculation and minority interest, plus interest bearing short-term and long-term debt, minus surplus cash and interest earning investments. This calculation is summarized in the following formula:

$$\begin{aligned} \text{Invested Capital} = & \\ & \text{Adjusted Equity} + \text{Minority Interest} + \text{Interest Bearing Debt} - \\ & \text{Cash} - \text{Interest Earning Investments} \end{aligned}$$

Advantages

The advantage of using return on invested capital in the PJM analysis is that it is more rigorous than the return on equity from a theoretical perspective. ROIC is not distorted by the debt leverage of a company and since it is computed using adjusted income and adjusted equity, it does not have the problems of non-recurring charges and investment distortions.

ROIC is advocated by many financial analysts because of the basic notion that value is created when the return on invested capital exceeds the weighted average cost of capital. For example, a well known text on valuation states²: “There are two key drivers

² Koller, T., Goedhart, M., Wessells, D., 2005, Valuation Measuring and Managing the Value of Companies, Hoboken, New Jersey, John Wiley & Sons p. 306.

of cash flow that ultimately drive value: the rate at which the company can grow revenues and profits, and its return on invested capital relative to the cost of capital.” Exxon Mobil describes the return on invested capital as follows: “The Corporation has consistently applied its ROIC definition for many years and views it as the best measure of historical capital productivity in our capital intensive long-term industry, both to evaluate management’s performance and to demonstrate to shareholders that capital has been used wisely over the long term.”

An advantage of using the ROIC in this study is the availability of cost of capital data from investment banks on PJM companies. In the Exelon/PSEG merger and the Constellation/FPL merger, a number of investment banks directly estimated the weighted average cost of capital. Investment banks made the following estimates of the cost of capital for PSEG, Exelon, Constellation and FPL, which can be used to assess the ROIC:

Cost of Capital Estimates		
Exelon/PSEG	Low	High
JPMorgan	5.25%	5.75%
Lehman Brothers	5.43%	6.43%
Morgan Stanley	5.50%	6.00%
Constellation/FPL		
Lehman Brothers/FPL	5.18%	6.18%
Lehman Brothers/Constellation	5.57%	6.57%
Morgan Stanley	6.00%	7.00%
Goldman Sachs	5.25%	7.25%
Median WACC	5.43%	6.43%

These weighted average cost of capital figures can be converted into cost of equity data through making assumptions with respect to incremental cost of debt and market-based capital structures. The cost of equity consistent with the weighted average cost of capital data in the above table ranges from 7.5% to 8%.

Disadvantages

Disadvantages of using the return on investment involve problems with making comparisons between PJM companies and regulated companies and general issues with computing rates of return. Unlike the return on equity, the return on invested capital cannot easily be compared to returns granted in regulatory proceedings. Unlike the ROE which is reported in Value Line, a consistent and valid calculation of ROIC is not generally reported by financial analysts. The ROIC has similar problems as the return on equity in that it cannot be interpreted as an economic return.

Prospective Return on Equity

Mechanics

The prospective return on equity is computed from the earnings per share projections for each company. As shown above in the discussion of unadjusted ROE, the return on equity can be computed through dividing the earnings per share divided by the book value per share. Since the earnings per share are given by management guidance or by investment analyst projections, the return on equity can be computed once the projected book value per share is established. Projected book value per share can be computed from the current adjusted book value per share incremented by earnings and reduced by dividends as demonstrated by the following formulas:

Current Book Value per Share = Adjusted Book Equity/Shares Outstanding

Projected Book Value per Share =
Current Book Value per Share + Earnings per Share – Dividends per Share

Projected Dividend per Share = Earnings per Share x Payout Ratio

Projected ROE =
$$\frac{\text{Projected Earnings per Share}}{\text{Average of Current and Projected Book Value per Share}}$$

Advantages

The primary advantage of using the computing prospective return on equity is that effects of prospective issues such as expiring rate caps, termination of bilateral contracts and alternative capacity price mechanisms can be evaluated. Through applying the formulas above, the earnings projections made by company management or investment analysts can be put in a context – the ROE – that allows comparison with regulated companies.

Disadvantages

The disadvantage of computing the prospective ROE is that the calculation is dependent on assumptions concerning dividend payout ratios and that some companies do not provide earnings guidance. Further, as with the other accounting based return measures, the returns do not correspond to true economic returns.

Holding Period Rate of Return

Mechanics

The holding period rate of return is computed from the internal rate of return on cash flows associated with making an investment in a stock. The rate of return is annualized using assumed dates for making an investment. Rates of return on cash flows

are computed through making an internal rate of return calculation on the following cash flows:

Cash Outflow at Start Date:	Negative of Stock Price
Intermediate Positive Cash Flows:	Dividends
Cash Inflow at Finish Date:	Stock Price

A simple example which demonstrates how the holding period rate of return is shown in the table below:

Illustration of Rate of Computing Rate of Return from IRR								
Price	Dividend	Cash	Starting	Opening	Return	Percent	Index	Cash/Index
100		(100)	100	100			1.00	(1.00)
105	5	5	110	100	10	10.0%	1.10	-
120		-	125	100	15	13.6%	1.25	-
114		-	119	100	(6)	-4.8%	1.19	-
113	5	5	123	100	4	3.4%	1.23	-
125		-	135	100	12	9.8%	1.35	-
130	10	140	150	100	15	11.1%	1.50	1.50
IRR		7.33%					IRR	6.99%

In order to make the calculation of internal rates of return from holding stocks as demonstrated in the table, we have gathered stock price, dividend and stock split data for each company from the yahoo website as follows:

- Daily stock prices (for some companies, the stock prices on a daily basis are available since 1970). The data are available on a non-adjusted basis for the closing price of each day.
- Dividend per share (the dividends per share are already adjusted for stock splits and include the date of the dividend payment).
- Dates of stock splits (the date of the stock split and the ratio used for the split is included for each company).

To adjust the holding period rates of returns for stock splits, stock prices are re-stated into the current per-share currency. For example, say the stock price is \$60 today and a 2 for 1 split occurred a year ago. If the stock price was \$100 on a date before the stock split, that price in today's per share currency would be \$50. Here, the holding period return would be \$10 assuming no dividends whereas if the currency correction had not been made, the analysis would incorrectly attribute a negative \$40 return (\$60 minus \$100.) This approach means that closing prices at dates before the stock split are divided by ratio of old shares to new shares:

$$\text{Adjusted Prior Price} = \text{Prior Price} \times (\text{Old Shares} / \text{New Shares})$$

To compute the holding period rate of return, we have entered the adjusted stock prices into a spreadsheet that accounts for alternative investment dates (i.e., date of original purchase of the share.) Once the initial investment date is selected, we assume the stock is held until the end of the time period and all dividends are received by the investor on the actual date the dividends are paid. Once the time series of adjusted prices is established, the internal rate of the investment that accounts for specific dates is presented.

In the case of Exelon, we measured the rate of return from the perspective of investors before the merger who held shares in different companies. The returns are different because investors in one company received a merger premium while investors in the other company paid the merger premium. Data for the company that was acquired is no longer recorded on the Yahoo website and must be gathered from the SEC 10-K forms that track quarterly stock prices. If the merger was accomplished with a share exchange, calculations of holding period returns from the perspective of investors in the acquired companies must reflect the exchange ratio. In the case of Exelon, the acquired company was named Unicom. Unicom shareholders received .875 shares of Exelon for each share of Unicom they owned. This means that a share of Unicom should be multiplied by $1/.875$ to put the share into the same currency as the current share price.

Advantages

The advantages of measuring costs and benefits of PJM policies using the holding period rates of return is that actual economic returns are measured. Further, because the stock price reflects future expected events and dividends measure realized cash flows, the holding period rate of return accounts for both prospective and historic performance. The holding period return can be computed using alternative beginning and ending periods to evaluate how returns to investors are affected by specific events. For example, the holding period returns over the past three years measure how returns are affected by worldwide increases in energy prices.

Disadvantages

The disadvantages of the holding period return is that it does not reflect the date at which investment was made in the company. To illustrate this imagine an investment in an oil project which was originally made when oil prices were \$30/barrel and which has public stock prices. If oil prices fall to \$20, increase to \$70 and then decline to \$50 the holding period return will depend on whether the start date is when oil prices are \$30, \$20 or \$70. The actual return should be measured on the basis of when real investments are made.

AES Corporation

Summary

PJM generating plants account for a relatively minor portion of the overall profit of AES. AES had a very pronounced run-up in share price with the strong equity markets before 2001; and the company then had an equally dramatic decline in stock price. Many events caused the decline in the stock price; including financial problems for the distribution companies in Brazil, the Argentinean currency crisis, and the bankruptcy of its 3,000 MW Drax plant in the UK.

The financial performance of AES does not provide background for evaluating retail or wholesale restructuring issues in PJM. Besides the small proportion of capacity dedicated to PJM, the financial analysis of AES is complex. Measurement of return on equity is not meaningful for AES because the book equity declined from \$5.5 billion in 2001 to negative \$300 million in 2002. Holding company returns for AES are affected by the extreme changes in AES' stock price. The holding period returns over different periods have virtually nothing to do with plants that sell power into PJM.

History and Corporate Structure

AES labels itself a global power company. It was formed in 1981 and is now a holding company with many subsidiary companies. AES began by making investments in project financed electricity plants that had long-term contracts. The company operates generation and distribution businesses in 25 countries on five continents.

AES separates its generation business into contract generation and competitive supply. The contract generation and competitive supply segments contributed 37% and 11% of revenues, respectively, for the year 2005. The segment of most interest for evaluating the profitability of generation sold into PJM and other de-regulated wholesale markets is the competitive supply segment which, at 11% of revenues, is a relatively minor part of the overall company. A description of the contract generation and the competitive supply included in AES' financial reports is included in the supplemental materials.

AES Generating Capacity

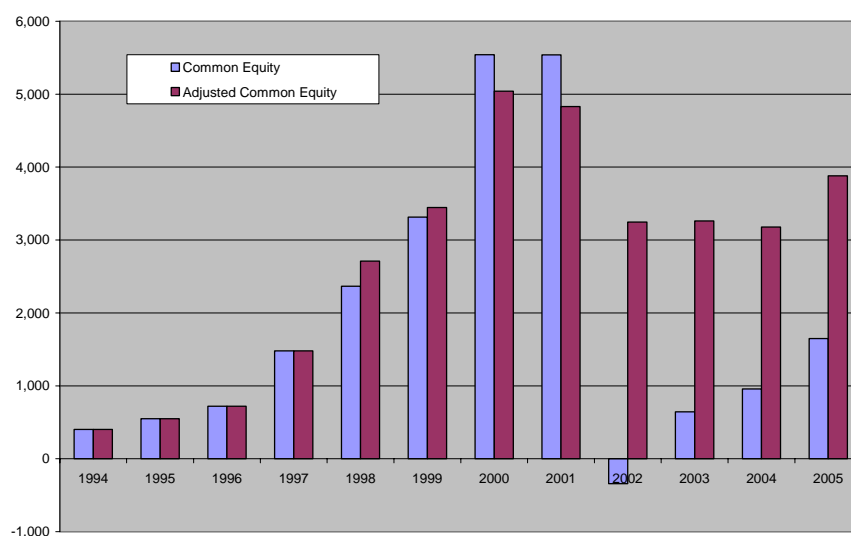
AES' competitive supply segment is comprised of 27 power generation facilities totaling approximately 13,000 MW in 7 countries. Less than 4% of AES' capacity is located in PJM as shown in the summary table below. Of the total 13,000 MW, 59% is coal-fired, 8% is gas-fired, and 29% is hydro. AES has two coal plants in PJM as shown in the chart below.

PJM Plants	Fuel Type		Year	MW	% of Merchant
Beaver Valley	Coal	Pennsylvania, U.S.	1987	125	
Warrior Run	Coal	Maryland, U.S.	1999	180	
Ironwood	Gas	Pennsylvania, U.S.	2002	705	
Red Oak	Gas	New Jersey, U.S.	2002	832	
Total PJM				1,842	14.2%
Non PJM Merchant				11,158	85.8%
Total Merchant				13,000	
Non Merchant				36,724	
Grand Total				49,724	

Historic Financial Results

The financial results of AES have been affected by re-statement of income which arose because of the company's reporting of taxes and foreign exchange losses. In 2002, AES's common equity was reduced by \$4.9 billion, much of which was related to foreign exchange translation adjustments. Once the accumulated other comprehensive loss and the goodwill are removed from AES' equity balance, the amount is more stable as shown in the graph below.

AES Common Equity



The return on equity on an adjusted and an unadjusted basis shows that AES did not earn extremely high returns during its run-up in stock prices. Instead, the price increase was due to very high valuations during the period before 2000. Once the adjustment is made to equity capital, the recent return is about 20%. The return on equity on an unadjusted and an adjusted basis is shown on the table below.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2001-2005 Average
Return on Equity										
Net Income	\$185	\$125	357	795	273	(3,509)	(452)	298	630	
Common Equity	1,481	2,368	3,315	5,542	5,539	(341)	645	956	1,649	
Average Common Equity	1,101	1,925	2,842	4,429	5,541	2,599	152	801	1,303	
Return on Average Equity	16.8%	6.5%	12.6%	18.0%	4.9%	-135.0%	-297.4%	37.2%	48.4%	-68.4%
Adjusted Return on Equity										
Income from Continuing Operations	188	311	374	806	446	(2,590)	294	264	632	
Impairment and FX loss			(62)	139	(12)	(2,668)	(113)	(210)	(89)	
Adjusted Income	188	311	436	667	458	78	407	474	721	
Accumulated Comprehensive Loss	0	-343	-131	(1,679)	(2,500)	(4,959)	(3,995)	(3,641)	(3,661)	
Intangible Assets and Goodwill				2,181	3,208	1,373	1,378	1,419	1,428	
Adjusted Common Equity	1,481	2,711	3,446	5,040	4,831	3,245	3,262	3,178	3,882	
Average Adjusted Equity	1,101	2,096	3,079	4,243	4,936	4,038	3,254	3,220	3,530	
Adjusted Return on Equity	17.1%	14.8%	14.2%	15.7%	9.3%	1.9%	12.5%	14.7%	20.4%	11.8%

Due to the accounting adjustments, a more reasonable approach to measuring returns is to examine alternative measures of return that exclude the effects of non-cash write-offs, including the return on invested capital, EBITDA/Investment and cash flow to average equity. The return on invested capital calculation has a similar pattern as the adjusted return on equity as shown on the table below:

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2001-2005 Average
Return on Invested Capital										
Revenues	\$1,411	\$2,398	4,117	7,534	6,299	7,380	8,413	9,463	11,086	
EBIT	\$368	324	1,207	1,872	2,173	2,026	2,367	2,612	2,976	
Depreciation			388	697	859	837	755	799	889	
EBITDA			1,595	2,569	3,032	2,863	3,122	3,411	3,865	
Tax Rate			35%	35%	35%	35%	35%	35%	35%	
NOPLAT	368	324	784.55	1216.8	1412.45	1316.9	1538.55	1697.8	1934.4	
Deferred Tax			12	(2)	47	(315)	(89)	190	100	
Cash Flow			836	1,362	1,364	600	1,073	1,463	1,710	
Invested Capital										
Adjusted Equity	1,481	2,711	3,446	5,040	4,831	3,245	3,262	3,178	3,882	
Total Debt	4,585	5,241	16,176	20,058	23,788	20,759	20,443	19,893	19,317	
Less: Cash and Investments		3,434	2,884	5,878	5,084	2,313	3,396	3,344	3,296	
Invested Capital	6,066	4,518	16,738	19,220	23,535	21,691	20,309	19,727	19,903	
Average Invested Capital	4,398	5,292	10,628	17,979	21,378	22,613	21,000	20,018	19,815	
ROIC	8.4%	6.1%	7.4%	6.8%	6.6%	5.8%	7.3%	8.5%	9.8%	7.6%
EBITDA/Invested Capital			15.0%	14.3%	14.2%	12.7%	14.9%	17.0%	19.5%	15.7%
Cash Flow/Invested Capital			7.9%	7.6%	6.4%	2.7%	5.1%	7.3%	8.6%	6.0%

AES Holding Period Return

The holding period returns reflect the increase and subsequent decline in share prices. In the past couple of years, AES has experienced increased returns in a similar manner as the other companies.

AES From: 17-October-96
Stock Price and Dividends
IRR over holding period 7.8%



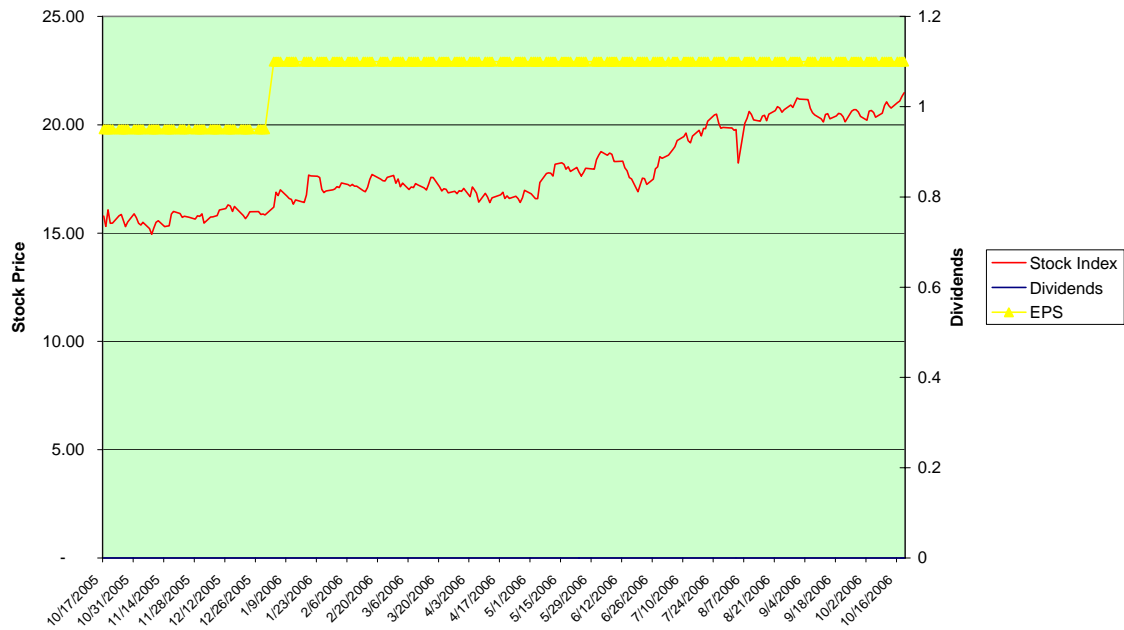
17-Oct-03

**AES From: 17-October-03
Stock Price and Dividends
IRR over holding period 38.7%**



17-Oct-05

**AES From: 17-October-05
Stock Price and Dividends
IRR over holding period 35.8%**



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Return on Equity												
Net Income	\$100	\$107	\$125	\$185	\$125	357	795	273	(3,509)	(452)	298	630
Common Equity	401	549	721	1,481	2,368	3,315	5,542	5,539	(341)	645	956	1,649
Average Common Equity	401	475	635	1,101	1,925	2,842	4,429	5,541	2,599	152	801	1,303
Return on Average Equity	24.9%	22.5%	19.7%	16.8%	6.5%	12.6%	18.0%	4.9%	-135.0%	-297.4%	37.2%	48.4%
Adjusted Return on Equity												
Income from Continuing Operations	\$100	\$107	125	188	311	374	806	446	(2,590)	294	264	632
Impairment and FX loss						(62)	139	(12)	(2,668)	(113)	(210)	(89)
Adjusted Income	100	107	125	188	311	436	667	458	78	407	474	721
Accumulated Comprehensive Loss Intangible Assets and Goodwill Writeoffs	0	0	0	0	-343	-131	(1,679) 2,181	(2,500) 3,208	(4,959) 1,373	(3,995) 1,378	(3,641) 1,419	(3,661) 1,428
Adjusted Common Equity	401	549	721	1,481	2,711	3,446	5,040	4,831	3,245	3,262	3,178	3,882
Average Adjusted Equity	401	475	635	1,101	2,096	3,079	4,243	4,936	4,038	3,254	3,220	3,530
Adjusted Return on Equity	24.9%	22.5%	19.7%	17.1%	14.8%	14.2%	15.7%	9.3%	1.9%	12.5%	14.7%	20.4%
Return on Invested Capital												
Revenues	\$533	\$679	\$835	\$1,411	\$2,398	4,117	7,534	6,299	7,380	8,413	9,463	11,086
EBIT	\$236	\$253	\$278	\$368	324	1,207	1,872	2,173	2,026	2,367	2,612	2,976
Depreciation						388	697	859	837	755	799	889
EBITDA						1,595	2,569	3,032	2,863	3,122	3,411	3,865
Tax Rate						35%	35%	35%	35%	35%	35%	35%
NOPLAT	236	253	278	368	324	784.55	1216.8	1412.45	1316.9	1538.55	1697.8	1934.4
Deferred Tax						12	(2)	47	(315)	(89)	190	100
Cash Flow						1,607	2,567	3,079	2,548	3,033	3,601	3,965
Invested Capital												
Adjusted Equity	401	549	721	1,481	2,711	3,446	5,040	4,831	3,245	3,262	3,178	3,882
Total Debt	1,144	1,223	2,008	4,585	5,241	16,176	20,058	23,788	20,759	20,443	19,893	19,317
Less: Cash and Investments					3,434	2,884	5,878	5,084	2,313	3,396	3,344	3,296
Invested Capital	1,545	1,772	2,729	6,066	4,518	16,738	19,220	23,535	21,691	20,309	19,727	19,903
Equity Capital	401	549	721	1,481	2,368	3,315	5,542	5,539	(341)	645	956	1,649
Debt	1,144	1,223	2,008	4,585	5,241	16,176	20,058	23,788	20,759	20,443	19,893	19,317
Total	1,545	1,772	2,729	6,066	7,609	19,491	25,600	29,327	20,418	21,088	20,849	20,966
Equity to Capital	25.95%	30.98%	26.42%	24.41%	31.12%	17.01%	21.65%	18.89%	-1.67%	3.06%	4.59%	7.87%
Average Invested Capital	1,545	1,659	2,251	4,398	5,292	10,628	17,979	21,378	22,613	21,000	20,018	19,815
ROIC	15.3%	15.3%	12.4%	8.4%	6.1%	7.4%	6.8%	6.6%	5.8%	7.3%	8.5%	9.8%
EBITDA/Invested Capital						15.0%	14.3%	14.2%	12.7%	14.9%	17.0%	19.5%
Cash Flow/Invested Capital						15.1%	14.3%	14.4%	11.3%	14.4%	18.0%	20.0%

AES Supplemental Materials

Contract Generation

According to AES:

“Performance drivers for our contract generation and competitive supply segments include plant reliability and fuel and fixed cost management. Growth is largely tied to securing new power purchase agreements and expanding capacity. Our contract generation businesses own and operate plants that sell electricity and related products to utilities or other wholesale customers under long-term contracts. Our contract generation facilities generally limit their exposure to commodity price risks, primarily electricity price volatility and frequently volume risk, by entering into power sales agreements of five years or longer for 75% or more of their output capacity. The remaining terms of these agreements range from 1 to 25 years. These facilities also generally enter into long-term agreements for most of their fuel supply requirements, or they may enter into tolling or “pass through” arrangements in which the counter-party directly assumes the risks associated with providing the necessary fuel and then markets the generated power. Through these types of contractual agreements, our contract generation businesses generally produce more predictable cash flows and earnings. The degree of predictability varies from business to business based on the degree to which their exposure is limited by the contracts they have negotiated with their buyers and fuel suppliers.”

Competitive Supply

Our competitive supply businesses own and operate plants that sell electricity to wholesale customers in competitive markets. These plants typically sell into local power pools under short-term (less than one year) contracts or into daily spot markets. This business segment offers more varied sales, earnings and cash flows than our other segments.

In contrast to the contract generation segment discussed above, these facilities generally sell less than 75% of their output under long-term contracts. The prices at which these facilities sell electricity under short-term contracts and in the spot electricity markets are unpredictable and can be volatile. In addition, our operational results in this segment are more sensitive to the impact of market fluctuations in the price of natural gas, coal, oil and other fuels. These businesses also have more significant needs for working capital or credit to support their operations than our businesses in the contract generation segment.”

Appendix: Return on Invested Capital (ROIC)

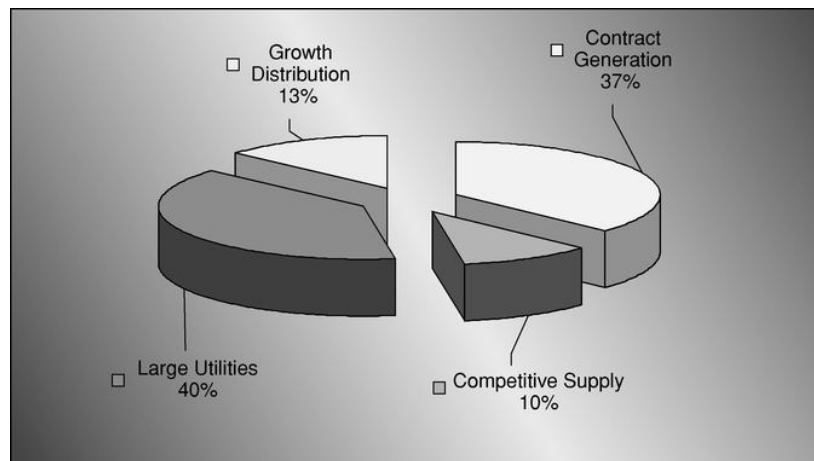
Net Operating Profit After Tax ⁽¹⁾	2005	2004	2003
IBT&MI	\$1,458	\$822	\$644
Reported Interest Expense	1,896	1,932	1,984
Income Tax Expense ⁽²⁾	(1,070)	(1,203)	(861)
Net Operating Profit After Tax	2,284	1,551	1,767
Effective Tax Rate ⁽³⁾	32%	44%	33%
ROIC ⁽⁴⁾	11.3%	7.7%	9.0%

Total Capital ⁽⁵⁾	December 2005	December 2004	December 2003	December 2002
Total Debt	\$17,706	\$18,588	\$19,638	\$20,047
Minority Interest	1,611	1,305	995	885
Stockholders' Equity	1,649	956	(101)	(855)
Debt Service Reserves and Other Deposits	(611)	(737)	(617)	(515)
Total Capital	\$20,355	\$20,112	\$19,915	\$19,562
Average Capital ⁽⁶⁾	\$20,234	\$20,014	\$19,739	

- (1) Net operating profit after tax is defined as income before tax and minority interest expense (IBT&MI) plus interest expense less income taxes less tax benefit on interest expense at the effective tax rate.
- (2) Income tax expense calculated by multiplying the sum of IBT&MI and reported interest expense for the period by the effective tax rate for the period.
- (3) Effective tax rate calculated by dividing reported income tax expense for the period by IBT&MI for the period.
- (4) Return on invested capital (ROIC), a non-GAAP financial measure, is defined as net operating profit after tax divided by average capital calculated over rolling 12 month basis.
- (5) Total capital is defined as total debt plus minority interest plus stockholders' equity less debt service reserves.
- (6) Average capital is defined as the average of beginning and ending total capital over the last 12 months.

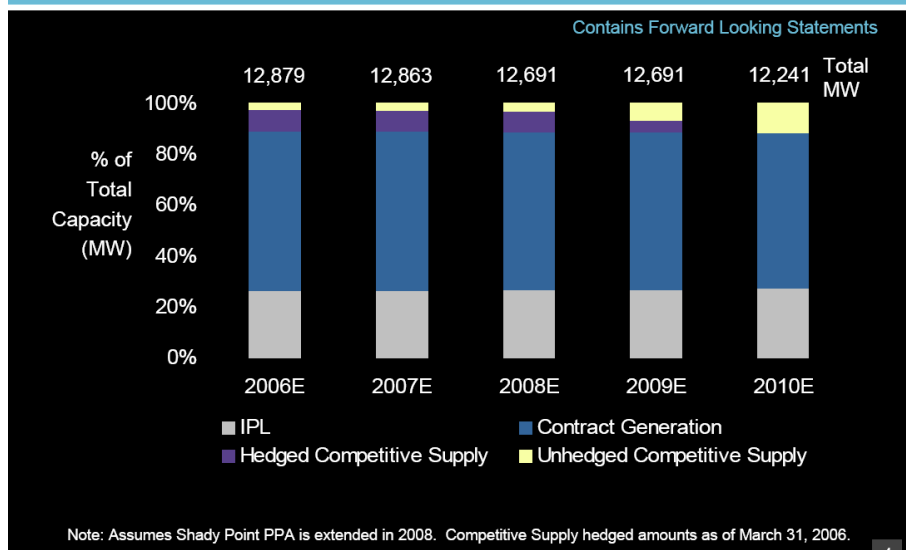
Note: Results exclude businesses placed in discontinued operations as of June 30, 2006.

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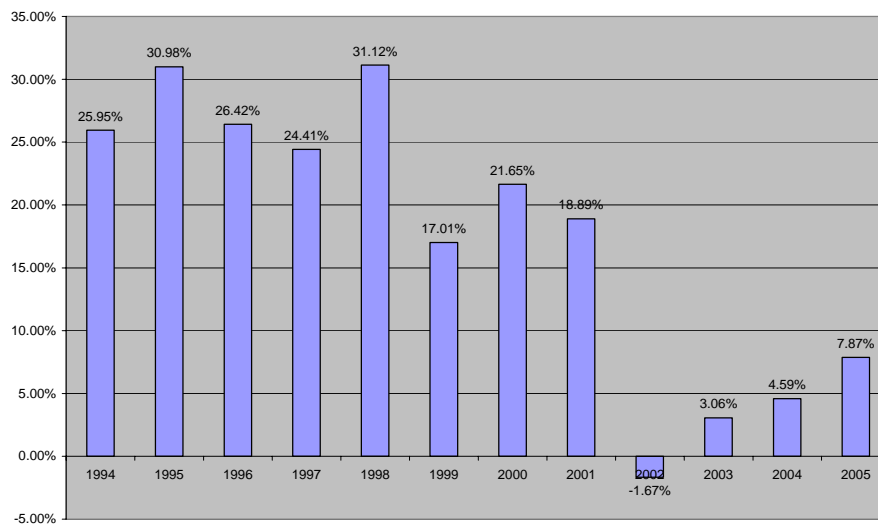


Generation Facilities in Operation	Fuel	Year of Acquisition Comment of Comm -MWS Operations*	Approxim Capacity Megawatts	Geographic Location
North America				
Deepwater	Pet coke	1986	143	Texas, U.S.
Beaver Valley	Coal	1987	125	Pennsylvania, U.S.
Placerita	Gas	1989	120	California, U.S.
Thames	Coal	1990	181	Connecticut, U.S.
Shady Point	Coal	1991	320	Oklahoma, U.S.
Hawaii	Coal	1992	180	Hawaii, U.S.
Kingston	Gas	1997	110	Canada
Alamitos	Gas	1998	2,083	California, U.S.
Redondo Beach	Gas	1998	1,310	California, U.S.
Huntington Beach	Gas	1998	563	California, U.S.
Cayuga	Coal	1999	306	New York, U.S.
Greenidge	Coal	1999	161	New York, U.S.
Somerset	Coal	1999	675	New York, U.S.
Westover	Coal	1999	126	New York, U.S.
Warrior Run	Coal	1999	180	Maryland, U.S.
Duck Creek	Coal	1999	366	Illinois, U.S.
Edwards	Coal	1999	772	Illinois, U.S.
Indian Trails Co-Gen	Gas	1999	19	Illinois, U.S.
Central and South America				
San Nicolas	Multiple	1993	650	Argentina
Rio Jaramento	Hydro	1995	112	Argentina
	2.00			
San Juan -2 plants	Hydro/Gas	1996	78	Argentina
Light -4 plants	Hydro	1996	788	Brazil
CEMIG -37 plants	Hydro	1997	5,668	Brazil
Los Mina	Oil	1997	210	Dominican Republic
Quebrada de Ullum	Hydro	1998	45	Argentina
EGE Bayano -2 plants	Hydro	1999	192	Panama
EGE Chiriqui	Hydro	1999	85	Panama
AES Tiete -10 plants	Hydro	1999	2,650	Brazil
AES Uruguaina	Gas	2000	600	Brazil
EDC	Thermal/Hydro	2000	2,265	Venezuela
Alicura	Hydro	2000	1,000	Argentina
Mamonal	Gas	2000	90	Columbia
TermoCandelaria	Gas	2000	314	Columbia
Merida III	Gas/Oil	2000	484	Mexico
Asia and the Pacific				
Cili Misty Mountain	Hydro	1994	26	China
Yangchun Sun Spring	Oil	1995	15	China
Wuhu Grassy Lake	Coal	1996	250	China
Ekibastuz	Coal	1996	4,000	Kazakhstan
Chengdu Lotus City	Gas	1997	48	China
Altai Power -6 plants	Coal/Hydro	1997	3,774	Kazakhstan
Hefei Prosperity Lake	Oil	1997	115	China
Jiaozuo Aluminum Power	Coal	1997	250	China
Lal Pir	Oil	1997	351	Pakistan
Pak Gen	Oil	1998	344	Pakistan
Aixi Heart River	Coal	1998	50	China
OPGC	Thermal	1998	420	India
Mt. Stuart	Kerosene	1999	288	Australia
Yarra	Gas	1999	510	Victoria
Jeeralong	Gas	1999	449	Australia
Gardabani	Gas/Oil	2000	600	Georgia
Kharmi I & II	Hydro	2000	223	Georgia
Europe				
Kilroot	Coal/Oil	1992	520	United Kingdom
Belfast West	Coal	1992	120	United Kingdom
Medway	Gas	1995	688	United Kingdom
Borsod	Coal	1996	171	Hungary
Tisza II	Oil/Gas	1996	860	Hungary
Tiszapalkonya	Coal	1996	250	Hungary
Indian Queens	Oil	1997	140	United Kingdom
Elsta	Gas	1998	405	Netherlands
Barry	Gas	1998	230	United Kingdom
Drax	Coal	1999	4,065	United Kingdom
Totals			42,133	
			42,133	
Under Construction				
Yangcheng Sun City	Coal	2001	2,100	China
Parana	Gas	2001	845	Argentina
Fifoots Point	Coal	2001	360	United Kingdom
Haripur	Gas	2001	360	Bangladesh
Meghnaghat	Gas	2001	450	Bangladesh
Medina Valley	Gas	2001	47	Illinois, U.S.
Andres	Gas	2002	310	Dominican Republic
Ironwood	Gas	2002	705	Pennsylvania, U.S.
Caracoles	Hydro	2002	123	Argentina
Puerto Rico	Coal	2002	454	Puerto Rico, U.S.
Kelanitissa	Diesel	2002	165	Sri Lanka
Red Oak	Gas	2002	832	New Jersey, U.S.
Granite Ridge	Gas	2002	720	New Hampshire, U.S.
Esti	Hydro	2003	120	Panama
Totals			7,591	

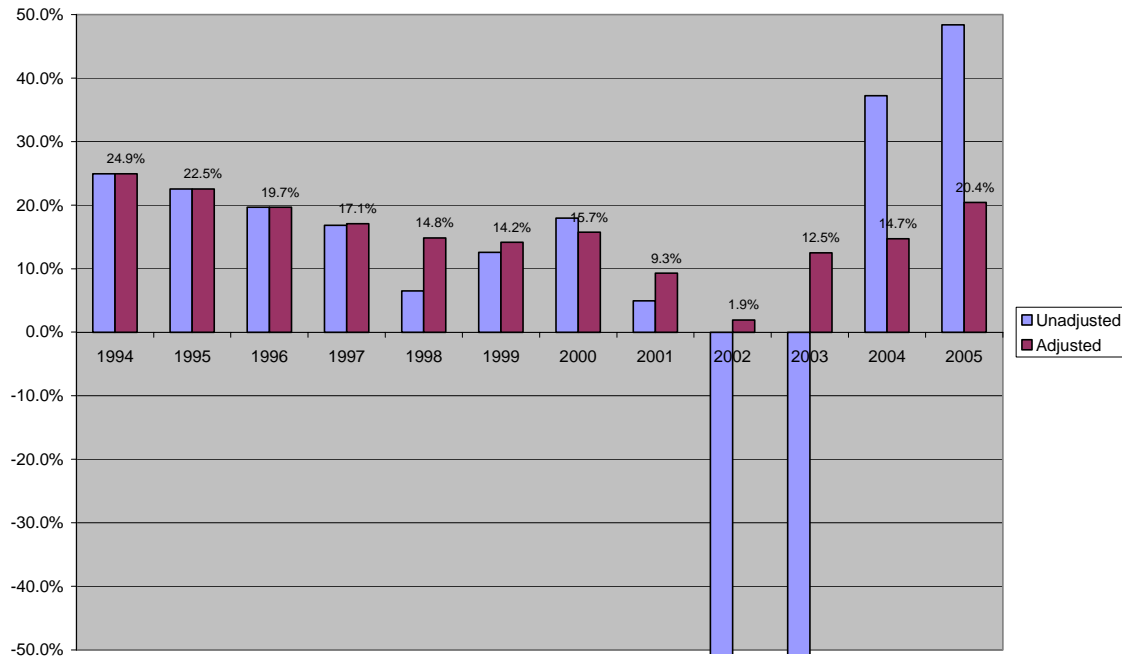
North America's Forward Capacity Profile



AES Equity to Capital



AES Return on Equity



2006 Financial Guidance Update: Cash Flow and Sensitivities

Contains Forward Looking Statements

<u>2006 Guidance Element</u>	<u>Updated Guidance</u>	<u>Prior Guidance</u>
Net Cash From Operating Activities	\$2.2 to \$2.3 billion	\$2.2 to \$2.3 billion
Maintenance Capital Expenditures	\$800 to \$900 million	\$800 to \$900 million
Free Cash Flow ⁽¹⁾	\$1.3 to \$1.5 billion	\$1.3 to \$1.5 billion
Subsidiary Distributions ⁽¹⁾	\$1.0 billion	\$1.0 billion
Parent Investments and Capital Expenditures ⁽²⁾	\$500 to \$600 million	\$250 to \$350 million
2008 Financial Targets⁽³⁾		
• Diluted EPS from Continuing Operations ⁽⁴⁾	\$1.18 to \$1.34	\$1.18 to \$1.34
• Gross Margin	\$3.5 billion	\$3.5 billion
• Return on Invested Capital ⁽¹⁾	11%	11%
• Net Cash Provided by Operating Activities	\$2.6 to \$2.9 billion	\$2.6 to \$2.9 billion

(1) Non-GAAP measures. See Appendix.

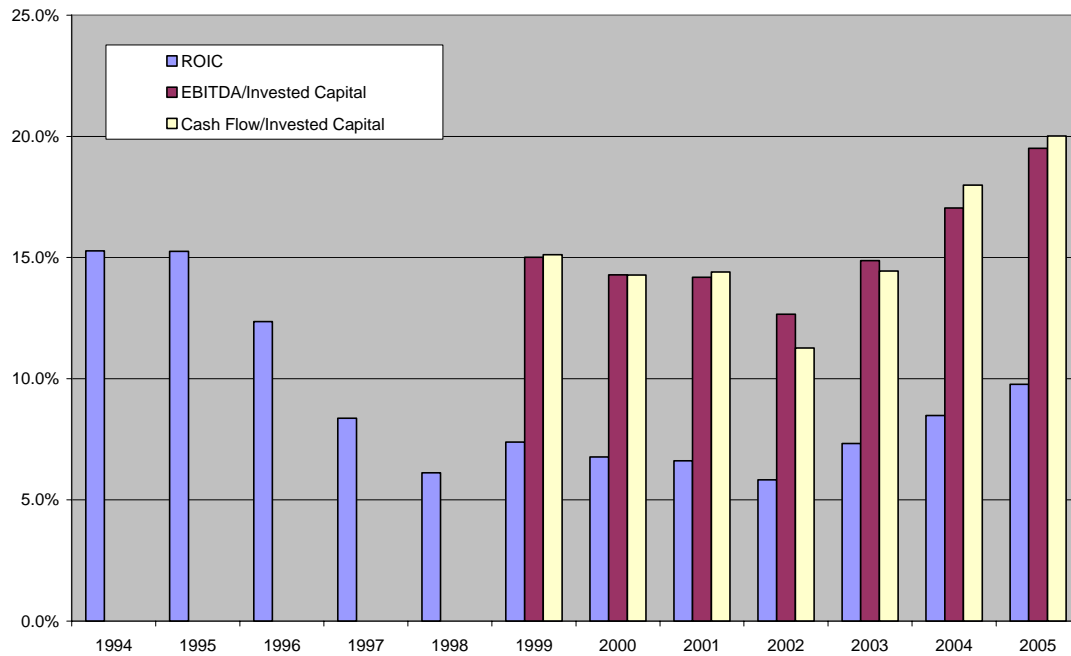
(2) Excludes other sources of funds. Total 2006 property additions are estimated to be \$1.7 to \$1.8 billion, including certain growth projects not yet awarded. Maintenance capital expenditures are expected to be \$800 to \$900 million, and growth capital expenditures are expected to be \$800 million to \$1 billion.

(3) Guidance includes growth projects committed to in 2004 and prior years.

(4) Based on 16-19% per year growth in diluted EPS from continuing operations from \$0.56 per share 2003 base (pre-restatement).

Note: Certain foreign exchange and interest rate sensitivities previously provided have not been updated.

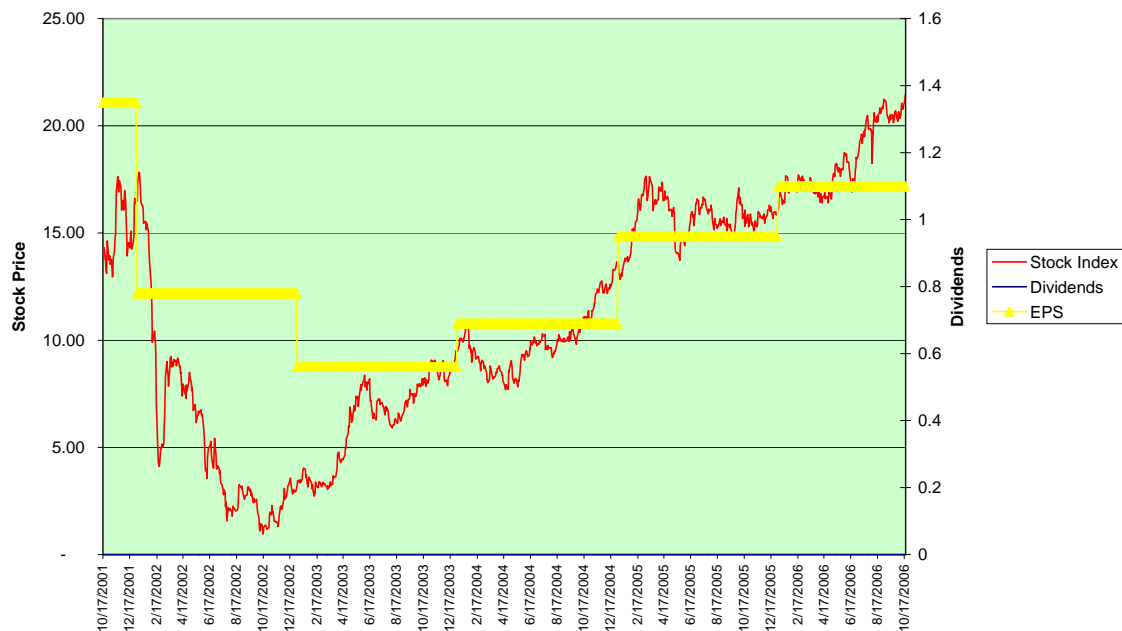
AES Return on Invested Capital and Cash Flow



17-Oct-01



AES From: 17-October-01
Stock Price and Dividends
IRR over holding period 8.4%



Allegheny Energy Inc

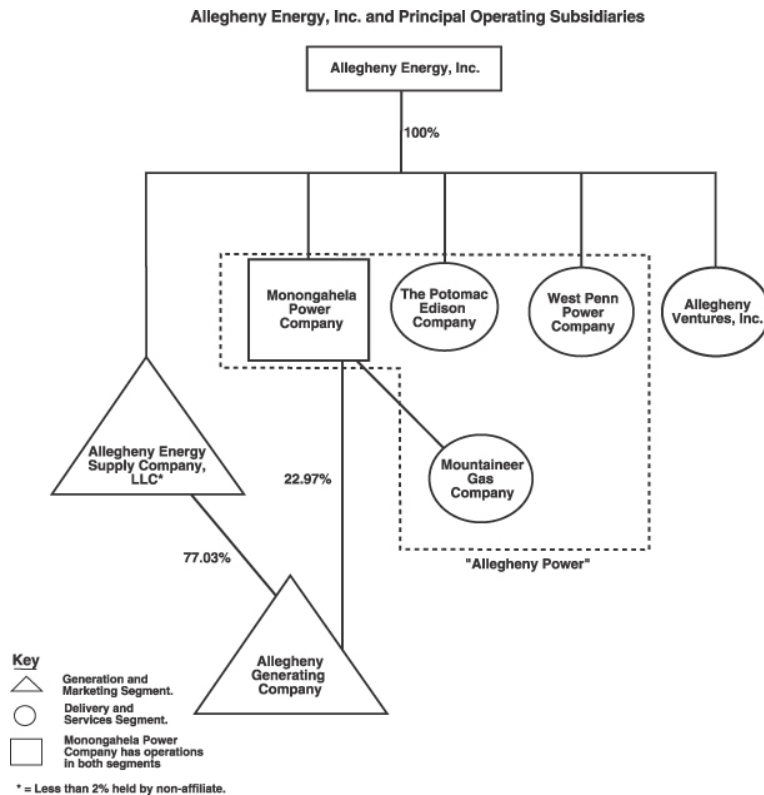
Summary

Historic financial analysis of Allegheny Energy is dominated by the losses and SEC investigations that occurred from problems associated with the company's trading activities. These losses were experienced after Allegheny purchased the trading operations of Merrill Lynch for \$489 million. Not only was the acquisition costly, but it resulted in large losses for the company. Allegheny's losses on trading nearly caused the company to go bankrupt – its credit ratings fell far below the minimum investment grade level (BBB-) to CCC. When Allegheny experienced these problems, it also eliminated its dividend to shareholders.

The trading losses, SEC investigations and other problems make analysis of the historic returns realized after restructuring difficult to analyze. Allegheny's return on equity was negative over the past five years because of speculative losses on the trading operations, and is not related to returns from selling electricity from its generating units. Furthermore, Allegheny changed its corporate structure and it reported its subsidiaries in a different manner making isolation of returns realized by selling power into PJM impossible. The most relevant measure of return for Allegheny is the holding period return over the past three years and the prospective return on equity. These measures are affected by PJM generation prices and are higher than returns for regulated utility companies.

Company History and Structure

Prior to 1999, Allegheny was as an integrated regulated utility with operations in West Virginia, Virginia, Pennsylvania and Maryland. In 1999, Allegheny separated part of its energy generation business from its T&D business by transferring a portion of its generation assets to a subsidiary company named AE Supply. The current corporate structure is illustrated in the diagram below. Allegheny's utility service territory which is held in three subsidiary companies is included in the supplementary materials.



In its financial statements, Allegheny presents data on a consolidated basis and for the Potomac Edison, Monongahela Power and Allegheny Generating Company. The generating company shown in the above diagram only includes a couple of assets and is not useful in analyzing the profit performance of all of the PJM assets.¹ After 2003, Allegheny stopped reporting results separately for its Allegheny Supply Company in 10-K reports.

Allegheny's Generating Capacity

Allegheny separates its regulated and non-regulated capacity in its financial statement. About 26% of Allegheny's capacity was built after restructuring and 72% of its unregulated capacity is coal. Allegheny's capacity is summarized in the following table:

¹ The activities of the generating company are described by the following statement: "AGC's only operating asset is an undivided 40% interest in the Bath County, Virginia pumped-storage hydroelectric station and its connecting transmission facilities."

	MW	Percent
Regulated		
Coal - PJM	1,898	18.3%
Non Coal - PJM	232	2.2%
Total	2,130	20.5%
Un-Regulated		
Coal - PJM	5,932	57.2%
Non Coal - PJM	1,787	17.2%
Total	7,719	74.4%
Non-PJM	526	5.1%
Total	10,375	100.0%

The profitability of Allegheny is driven by the unregulated coal-fired generation capacity located in PJM. This is 57% of the company's capacity and constitutes almost 6,000 MW.

Historic Financial Analysis

The table below shows Allegheny's return on equity on an unadjusted basis and adjusted for goodwill write-offs, comprehensive income and other non-recurring items. The company experienced large negative income in 2002, 2003 and 2004 which reduced its equity balance by about \$500 million. Income stabilized in 2005 suggesting that returns can be evaluated on a prospective basis.

	2001	2002	2003	2004	2005	Average
Financial Data for ROE						
Income for ROE						
Gross Margin	1,116,765	1,701,255	1,277,378	1,813,278	1,842,940	
Net Income Unadjusted	448,922	(502,176)	(308,875)	(310,598)	75,145	
Net Income from Continuing Operations	448,922	(502,176)	(334,214)	(310,598)	68,993	
Goodwill and Other Non-Recurring Adjustments	-	-	4,415	345,708	53,067	
Net Income w/o Writeoffs	448,922	(502,176)	(329,799)	35,110	122,060	
Equity Balance for ROE						
Unadjusted Equity Balance	-	1,931,507	1,515,859	1,353,816	1,695,295	
Average Equity	1,931,507	1,931,507	1,723,683	1,434,838	1,524,556	
Adjusted Equity Balance	-	-	-	367,287	367,287	
Add: Goodwill	-	-	-	367,287	367,287	
Add: Accumulated Other Comprehensive Income	-	(30,412)	(92,204)	(108,741)	(142,721)	
Adjusted Equity	1,961,919	1,961,919	1,608,063	1,095,270	1,470,729	
Average Adjusted Equity	1,961,919	1,961,919	1,784,991	1,351,667	1,283,000	
Return on Equity						
ROE Unadjusted	23.2%	-26.0%	-17.9%	-21.6%	4.9%	-7.5%
ROE Adjusted	22.9%	-25.6%	-18.5%	2.6%	9.5%	-1.8%
ROE - Value Line	17.2%	-26.3%	-22.1%	6.1%	9.1%	-3.2%

The return on invested capital and cash flow ratios have a similar pattern. Allegheny's recent returns imply that the company has recently earned its cost of capital.

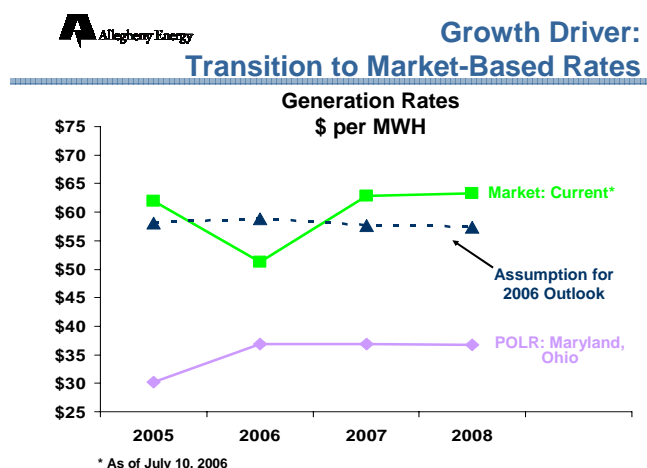
	2001	2002	2003	2004	2005	Average
Financial Data for Return on Invested Capital and Cash Flow Ratios						
Income for ROIC						
EBIT	960,101	(499,140)	(196,379)	589,230	536,791	
Tax Rate	35%	35%	35%	35%	35%	
NOPLAT	624,066	(324,441)	(127,646)	383,000	348,914	
Depreciation	115,962	118,973	286,200	299,425	308,141	
EBITDA	1,076,063	(380,167)	89,821	888,655	844,932	
Deferred Tax	278,785	(205,195)	(158,432)	(18,907)	(47,334)	
Cash Flow	843,669	(588,398)	(202,031)	315,628	382,867	
Invested Capital						
Adjusted Equity	1,961,919	1,961,919	1,608,063	1,095,270	1,470,729	
Add: Interest Bearing Debt	-	5,263,152	5,813,347	5,045,312	4,164,116	
Less: Cash and Investments	-	236,175	573,619	236,110	311,625	
Average Investment	6,988,896	6,988,896	6,918,344	6,376,132	5,613,846	

Return on Invested Capital and Cash Flow Ratios

ROIC	8.93%	-4.64%	-1.85%	6.01%	6.22%	2.93%
EBITDA/Investment	15.40%	-5.44%	1.30%	13.94%	15.05%	8.05%
Cash Flow/Equity	43.00%	-29.99%	-11.32%	23.35%	29.84%	10.98%

Prospective Outlook

In its presentations to investors, Allegheny emphasizes the benefits it will receive when the rate caps in Pennsylvania come to an end. As with other companies, it does not label the rate increases as revenue increases, but rather as the cessation of provider of last resort obligations. An example of one of the presentations is shown below.



With the expiration of contracts that Allegheny calls POLR obligation, the company's operating profit for the company is expected to increase by \$50 million in 2006 after C&I rates were deregulated, and it is expected to increase by \$450 million in 2010 following the deregulation of residential rates.

Allegheny does not make earnings estimates in its presentations. However stock analysts project strong earnings growth as shown in the table below. Given the stabilization of Allegheny's finances, these return increases primarily result from investor

benefits related to selling generation into PJM. The prospective returns are summarized in the table below. Further details on the projected returns are shown in the supplementary materials.

Allegheny Summary

Shares Outstanding	163.9				
Share Price					
Share Price at End of Study Period	42.24				
End of 2006 Share Price	44.74				
Common Equity on Balance Sheet (\$ Millions)					
Reported	1,695				
Adjusted	1,471				
Book Value per Share					
Reported	10.34				
Adjusted	8.97				
Market to Book Value - December 2006					
Reported	4.33				
Adjusted	4.99				
	2006	2007	2008	2009	2010
EPS Estimates					
Value Line	1.80	2.15		3.00	
Yahoo - Base	1.81	2.26	2.65	3.21	3.88
Yahoo - High	1.85	2.45	2.71	3.28	3.97
Yahoo - Low	1.76	2.10	2.58	3.12	3.77
ROE Estimates from Yahoo Earnings					
High Case	19.6%	23.3%	23.0%	24.6%	26.2%
Low Case	18.4%	19.2%	20.5%	21.4%	22.2%

Allegheny Holding Period Returns

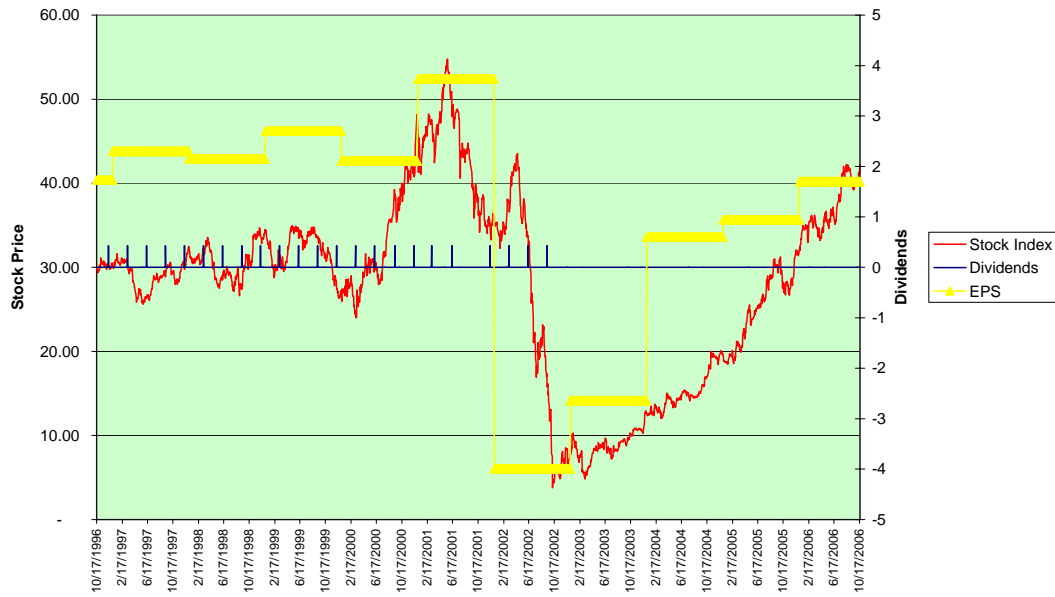
Analysis of holding period returns to determine the financial impact of restructuring is difficult for Allegheny because of the effects of its trading problems. We have computed the returns from the perspective of a shareholder who originally held Allegheny shares since 1996, when the company was a regulated vertically integrated utility company and from 2003, after the trading problems were resolved.

Allegheny's holding period returns are highly dependent on the period over which the returns are measured. Over the three year period, returns were 60% while over the ten-year period, returns were only 6.9% (see the following graphs).

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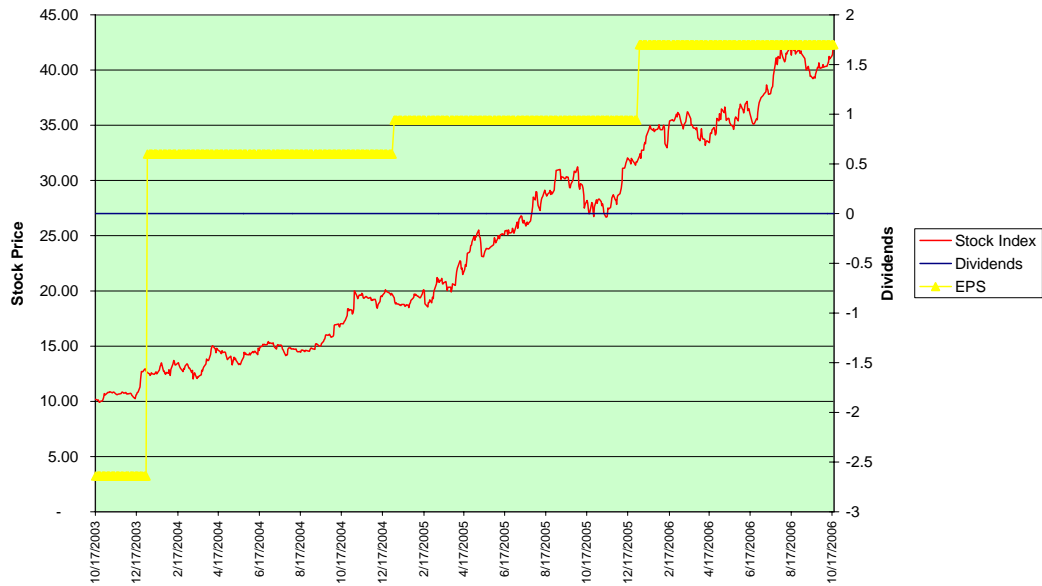
AYE From: 17-October-96
Stock Price and Dividends
IRR over holding period 6.9%



17-Oct-03



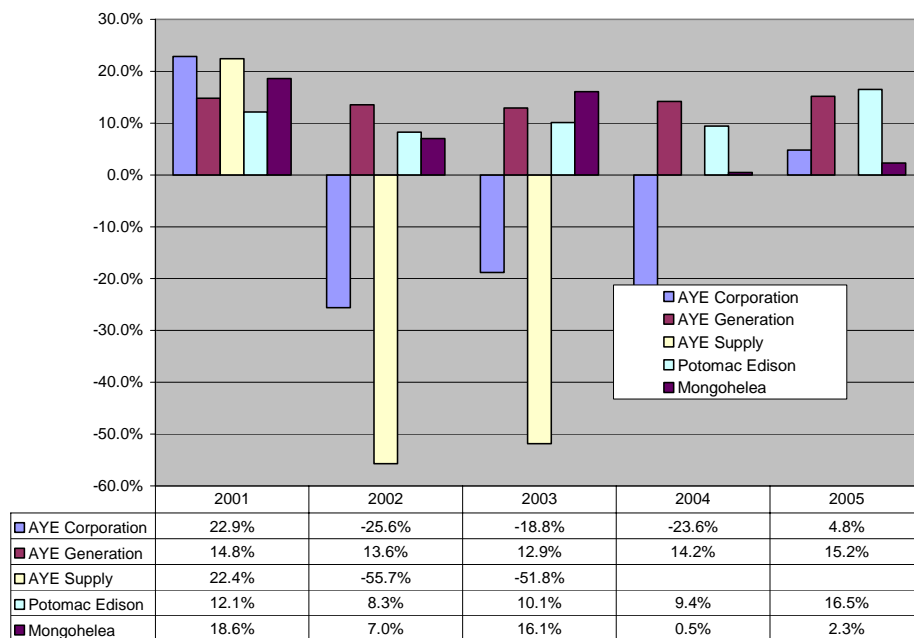
AYE From: 17-October-03
Stock Price and Dividends
IRR over holding period 60.0%



Segment by Segment Analysis

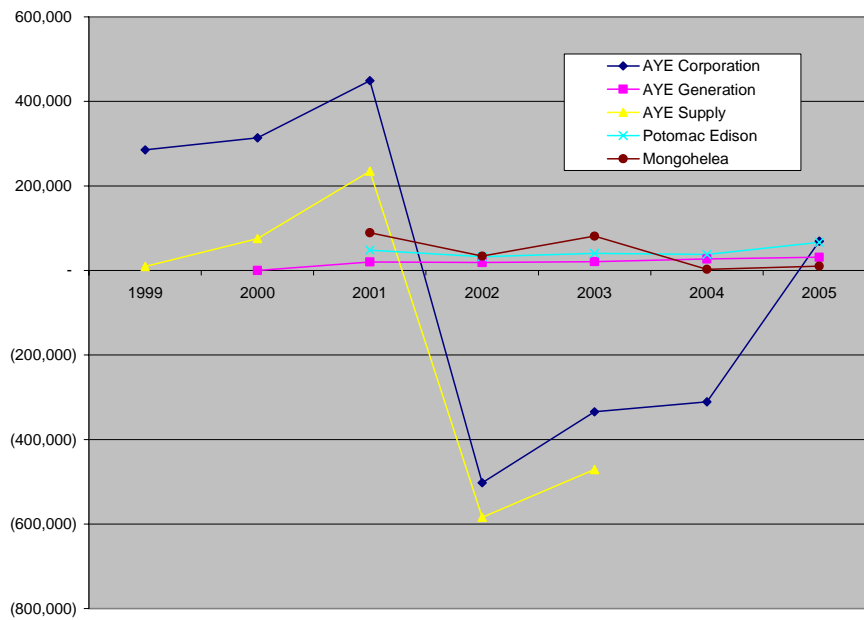
The segment analysis shows that Potomac Electric has experienced strong and stable returns while the supply segment had problems in 2002 and 2003. As with other companies, we have computed alternative measures of return on equity through using net income from continuing operations and through adjusting the equity denominator for accumulated other comprehensive loss and goodwill. The adjusted ROE by segment is shown below (the AYE generation segment is small and has power contracts.)

Allegheny Adjusted ROE by Segment

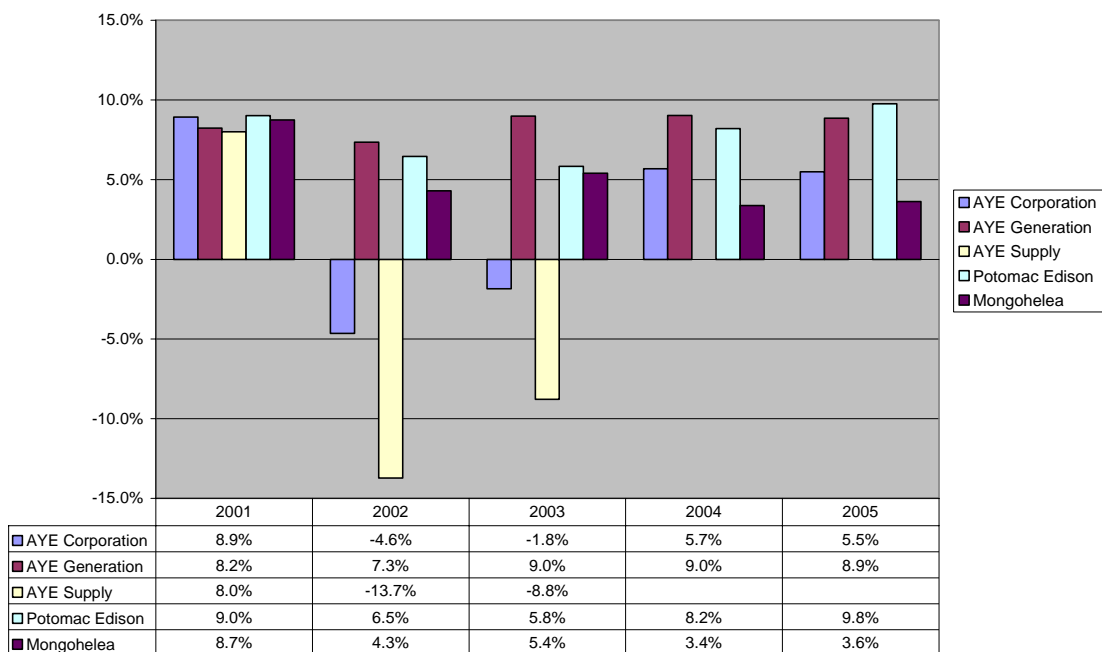


For Allegheny and other companies that have experienced credit problems, we examine return on invested capital. A problem in the Allegheny analysis with analyzing segments is that reporting has changed as the company has had its accounting problems. For example, the Energy Supply financials are not presented in the 2005 10-K. The charts below show that the regulated segments have been stable while the problems came from the Supply segment that included energy trading. The EBITDA chart demonstrates that unlike other companies that experienced non-cash write-offs, Allegheny has incurred cash losses.

Allegheny Net Income from Continuing Operations



Allegheny Return on Invested Capital



Constellation Energy Group

Summary

The Constellation case study demonstrates how measures of profitability must consider prospective earnings that will occur after the cessation of rate caps and bilateral contracts. Constellation projects its earnings to increase by as much as 70% in the next two years with the expiration of Constellation Power Source's 90% of full requirements contract with BG&E in June 2006. From the start of retail choice and the accompanying imposition of rate caps in 1999, Constellation's return on equity (adjusted to be comparable to regulated utilities) has remained in the 12%-15% range. In the next two years Constellation's return is projected to increase to the 16%-18% range.

Constellation's historic return on equity suggests that the company has recovered its stranded investment. That prospective returns are far in excess of the returns realized by regulated companies demonstrates that PJM companies recovered their costs during the transition period and then realize upside from depreciated baseload capacity. Constellation's financial performance is demonstrated by holding period returns which have generated an annual rate of return of almost 20% over the past three years. This holding period return does not include a further 18.8% increase in stock price realized after termination of the merger with FPL.

History and Corporate Structure

Constellation Energy was incorporated in 1995, and became the holding company for Baltimore Gas & Electric (BG&E) and its subsidiaries in 1999. Constellation currently separates its business into two functions – the BG&E regulated utility (which has both electric and gas distribution) and unregulated merchant activities. Merchant activities in turn include (1) generation plants selling into PJM and other markets, including plants formerly owned by BG&E; (2) wholesale marketing and risk management; (3) retail operations providing services to retail consumers; and (4) generation operations and maintenance services operations.

BG&E transferred its generating plants at book value to Constellation Power Source Generation and Calvert Cliffs Inc in 2000. Constellation Power Source provided BG&E with the energy and capacity required to meet its standard offer service obligations for the first three years of the transition period (July 1, 2000 to June 30, 2003). Constellation Power Source provided 90% and Allegheny Energy provided 10% of generation requirements for the final three years (July 1, 2003 to June 30, 2006) of the transition period.

Constellation's regulated BG&E business has comprised only 25% to 30% of Constellation's income since 1999 when the holding company was created. In its 10-K form, Constellation provides consolidated financial statements and financial statements for BG&E. It does not include separate financial statements for the Constellation Power Source or other merchant activities.

Constellation Generating Capacity

Generating assets originally owned by BG&E and transferred to non-regulated subsidiaries represent about 6,240 MW of capacity. In 2000, the plants had a book value of \$2.4 billion suggesting a value per kW of \$384/kW. Currently, these generating assets represent 53% of Constellation's generating capacity as shown on the summary table below:

Constellation Capacity		
	Capacity MW	Percent
PJM - Base Load	5,308	44.8%
PJM - Non Baseload	2,022	17.1%
Non-PJM Baseload	2,231	18.8%
Non-PJM Peaking	2,295	19.4%
Total	11,856	100.0%

Much of the non-PJM baseload capacity includes nuclear plants with long-term contracts. For example, in 2001 Constellation purchased the Nine Mile 1 nuclear plant, located near Oswego, New York.

Historic Financial Analysis

With the exception of 2001, Constellation's historic returns on equity have varied between 11% and 13% as shown on the table below. These returns, which are above comparable regulated utilities, suggest that Constellation has recovered its stranded investment under the mandated rate caps. In 2001, Constellation booked impairment losses and a contract termination cost with Goldman Sachs of \$225 million (pre-tax) related to trading activities. These losses had nothing to do with PJM operations and are excluded from the return on equity calculation shown on the table below. The return on equity is measured using the earnings per share (EPS) from continuing operations as explained in Appendix 1. Accumulated Other Comprehensive Income is eliminated from the equity balance because it includes income that was neither invested by shareholders nor recorded on the income statement.

Return on Equity	2001	2002	2003	2004	2005	Average
Financial Statistics						
Net Income from Continuing Operations	82	526	457	567	607	
Goodwill Impairment and Non-Recurring	357	88	2	10	21	
Net Income before Adjustments	440	614	459	576	628	
Common Equity Balance	3,862	3,862	4,141	4,727	4,916	
Less: Goodwill	-	116	144	145	147	
Less: Accumulated Other Comp Income	190	(194)	(121)	(202)	(516)	
Adjusted Equity Balance	3,672	3,941	4,118	4,784	5,284	
Average Adjusted Equity	3,672	3,807	4,029	4,451	5,034	
Unadjusted Return on Equity	2.1%	13.6%	11.4%	12.8%	12.6%	10.5%
Adjusted Return on Equity	12.0%	16.4%	11.7%	13.6%	13.2%	13.4%
Value Line Return on Equity	9.2%	9.3%	11.1%	11.7%	12.3%	10.7%

We have computed the return on equity for the BG&E segment and subtracted the BG&E data from the consolidated financial data to compute merchant returns. The table below shows returns on equity, return on invested capital and other cash flow ratios for Constellation, BG&E and the residual merchant activities. Constellation's non-regulated activities have generated somewhat higher returns on equity than those for the regulated segment. This is in part due to differences in debt leverage at the different company segments, resulting in differing amounts of equity.

	2001	2002	2003	2004	2005	Average
ROE Unadjusted						
Consolidated	2.4%	13.6%	6.9%	12.2%	12.9%	9.6%
BG&E	5.8%	8.9%	10.2%	10.0%	11.0%	9.2%
Merchant and Other	0.3%	16.5%	5.0%	13.3%	13.9%	9.8%
ROE Adjusted						
Consolidated	14.5%	15.6%	11.4%	13.0%	12.5%	13.4%
BG&E	9.7%	11.3%	10.2%	10.0%	11.4%	10.5%
Merchant and Other	17.4%	18.1%	12.1%	14.5%	13.0%	15.0%
ROIC						
Consolidated	5.82%	6.32%	6.93%	6.63%	6.75%	6.5%
BG&E	6.73%	6.46%	6.67%	6.70%	7.32%	6.8%
Other	5.18%	6.21%	7.09%	6.58%	6.45%	6.3%
EBITDA/Investment						
Consolidated	14.5%	16.1%	17.1%	17.0%	17.5%	16.5%
BG&E	17.4%	17.0%	17.7%	18.5%	19.2%	17.9%
Other	12.5%	15.5%	16.8%	16.2%	16.7%	15.5%
Cash Flow/Equity						
Consolidated	12.3%	29.9%	26.6%	28.2%	28.0%	25.0%
BG&E	20.9%	26.0%	29.6%	28.2%	25.7%	26.1%
Other	7.1%	32.3%	24.8%	28.2%	29.1%	24.3%

The overall return on investment does not have the same pattern as that shown for return on equity. The lower return on merchant and other non-regulated business is confirmed by statistics presented in Constellation's 10-K forms. This data shows that the

holding company's percentage of income from merchant and other non-BG&E business is lower than the percentage of assets for these same business units.

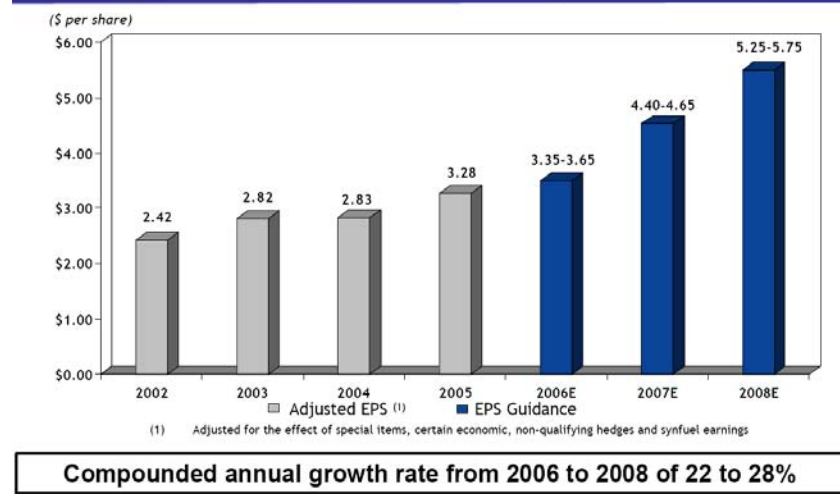
Prospective Return on Investment

The historic returns presented above were earned under rate caps, and therefore do not consider the higher revenues that Constellation will realize from the impending rate increases discussed above. Prospective return estimates can be derived from various sources including:

- Earnings guidance provided by Constellation
- Earnings projections made by Value Line
- Earnings projections from investment analysts reported by Yahoo! Finance

The graph below shows the earnings guidance provided by the company in a report to investment analysts. This document shows dramatic projected increases in earnings for 2008 that are almost double the earnings realized in 2002.

Earnings Outlook



The earnings increases shown above will be realized because of the expiration of price caps and bilateral contracts as explained in the following quote from Value Line: "Constellation's energy supply business is benefiting from higher prices as price caps fall off, contracts expire and the company can get market price for its power. Price caps in Maryland expired in mid-2006 and Constellation's mid-Atlantic generating fleet is benefiting from this. That's why earnings are likely to be much higher in 2006 and 2007."

Financial results during the first three months following the expiration of BG&E's rate caps demonstrate that Constellation's revenues from the power sold to BG&E have increased by more than 65%.

To convert the earnings per share projections into returns on equity, assumptions must be made regarding how cash will be deployed from increased earnings. The table below summarizes the projected return on equity using alternative earnings estimates and demonstrates that returns are projected to increase to between 15.5% and 17.5%.

Constellation				
Shares Outstanding	178.3			
Share Price at End of Study Period	70.02			
End of 2006 Share Price	59.67			
Common Equity on Balance Sheet (\$ Millions)				
Reported	4,916			
Adjusted	5,284			
Book Value per Share				
Reported	27.57			
Adjusted	29.63			
Market to Book Value - December 2006				
Reported	2.54			
Adjusted	2.36			
	2006	2007	2008	2009
EPS				
Constellation - Low	3.35	4.40	5.25	6.41
Constellation - High	3.65	4.65	5.75	7.36
Value Line				
Value Line	3.95	4.55	5.53	6.50
Yahoo				
Yahoo	3.84	4.56		
Return on Equity				
Constellation - Low	11.89%	14.48%	17.48%	21.72%
Constellation - High	10.96%	13.65%	15.47%	17.80%

The company's overall projected growth in earnings predominantly comes from the deregulated segments of the company as demonstrated by the following statements made by Value Line: "Utility profits are down. But hefty growth in income from Constellation's competitive energy businesses is outweighing these negatives."

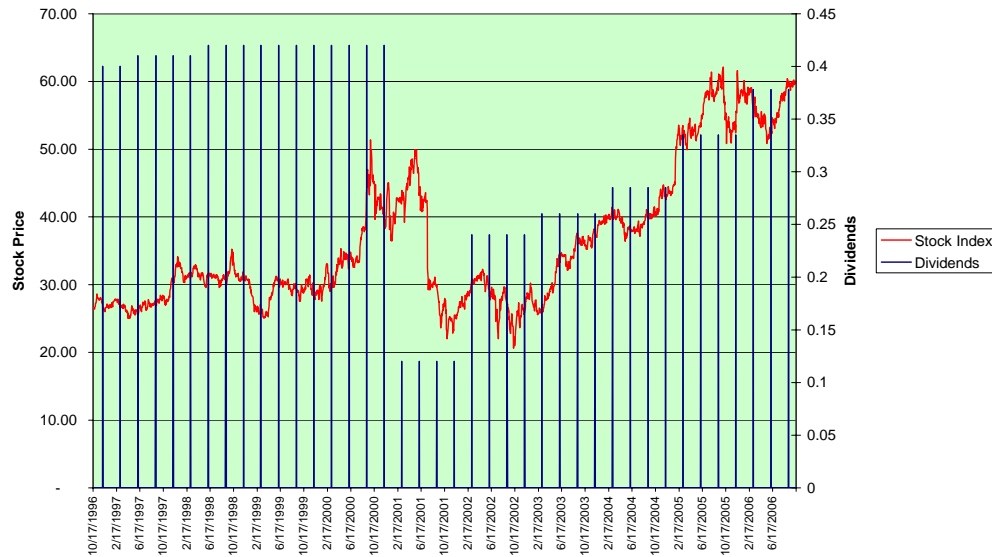
Constellation Holding Period Returns

Given that the de-regulation Act was signed in early 1999, we have computed the returns to investors who purchased a share before the Act was passed and then held the share until June 2006. In the case of Constellation, this analysis is distorted by the financial problems the company experienced in 2001, which led to a large decline in earnings and a reduction in dividends, as shown in the following graph. Constellation's stock prices increased in 2000 and then decreased by 50% decrease in 2001. The 2001 decrease was caused by several events, including termination of a business services contract with Goldman Sachs (\$139.6 million after-tax loss), asset impairments (\$100.2 million loss), workforce reduction costs (\$ 64.1 million loss), and loss on sale of assets (\$28.1 million loss). Prices have steadily increased since 2002 and returns have been above 21% since the beginning of 2002.

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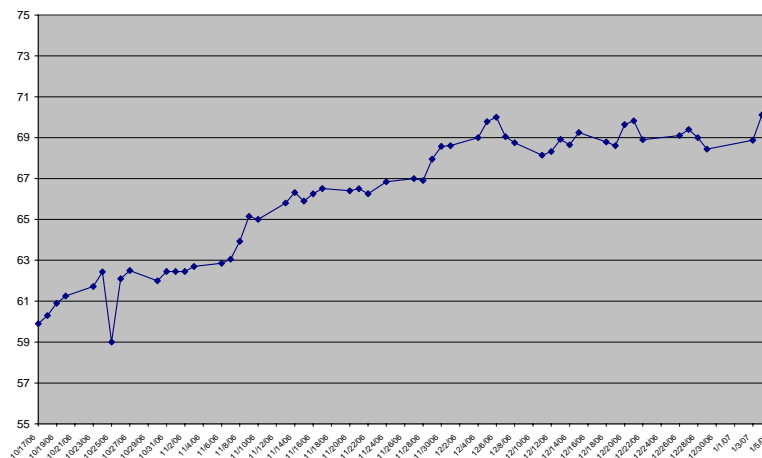


**CEG From: 17-October-96
Stock Price and Dividends
IRR over holding period 12.7%**



Holding period returns shown in the above graph do not include a recent run-up in price that followed the termination of the planned merger with FPL. The run-up in stock price is shown in the graph below.

Constellation Stock Price Update



Electric generation deregulation in Maryland

On April 8, 1999, the Maryland legislature enacted the Electric Customer Choice and Competition Act of 1999 (the Act) and accompanying tax legislation that restructured Maryland's electric utility industry. On November 10, 1999, the Maryland PSC issued a Restructuring Order that addressed the major provisions of the Act, including a required BG&E reduction in residential base rates by approximately 6.5%, equal to a decline in revenue of about \$54 million a year. These rates were frozen until July 2006. Electric delivery service rates were frozen through June 2004 for commercial and industrial customers. The generation and transmission components of rates were frozen for different time periods depending on the service provided to those customers.

The Maryland PSC held proceedings to determine how power would be procured following the expiration of BG&E's residential rate caps, and concluded that BG&E would procure the power to serve BG&E residential customers beginning July 2006 via auctions to be conducted in late 2005 and early 2006. The procured power costs of these auctions resulted in an average residential customer bill increase of 72%.

Because of concerns over the large rate increase, the Maryland legislature held a special session in June 2006, and approved Senate Bill 1 which, among other things:

- “ imposes rate stabilization measures that (i) cap rate increases by BG&E at 15% from July 1, 2006 to May 31, 2007, (ii) gives residential customers the option from June 1, 2007 until January 1, 2008 of paying a full market rate or choosing a short term rate stabilization plan and (iii) provides for full market rates for residential service starting January 1, 2008;
- “ allows BG&E to recover deferred costs from its customers over a period not to exceed 10 years.

As shown above, over the entire period since the Act was passed, Constellation has outperformed the regulated portfolio. If the holding period is measured since the beginning of 2002, Constellation energy has increasingly outperformed the index by a wide margin.

Stranded Investment Comments

Some comments made by Constellation stranded investment collection are below:

For the generating assets formerly owned by BG&E, the primary source of the estimated “stranded cost” was the Calvert Cliffs Nuclear Power Plant (“Calvert Cliffs”). At the time of the 1999 Settlement and subsequent asset transfer, nuclear power plants were not highly valued due to low fuel prices for other electricity generating fuels such as natural gas and coal, high fixed operating costs and associated nuclear and fossil plant operating risk. As a result, fossil fuel-fired power plants with much lower fixed-cost structures were considered more valuable than nuclear power plants.

According to Constellation, the appraised value of these power plants as of March 2006 is \$4.3 billion. This compares to an appraised value embedded in the 1999 Settlement of \$2.3 billion (that is, a book value of \$2.8 billion less an approved stranded cost collection of \$0.5 billion). The company reports having subsequently invested an additional \$0.9 billion, for a new investment basis of \$3.2 billion, and states that “over the six year interval since 1999, this represents a fairly modest 5.3% annual rate of appreciation on our investment basis.”

Dominion Resources

Summary

Dominion Resources is a diversified company with regulated operations, oil and gas production, natural gas pipelines and generating plants located all over the nation. It is very difficult to make conclusions concerning generating plants in PJM from the Dominion financial data because a small portion of its income comes from the PJM plants and it does not report income from this capacity in a standalone entity. The return analysis for Dominion is not pertinent to stranded investment or retail restructuring issues for the PJM region.

History and Corporate Structure

Dominion's subsidiaries are Virginia Power, Consolidated Natural Gas Company (CNG), Dominion Energy, Inc. (DEI) and Virginia Power Energy Marketing Inc. (VPEM) which perform a variety of different functions:

- Virginia Power is a regulated public utility that generates, transmits and distributes electricity.
- CNG operates in all phases of the natural gas business, explores for and produces natural gas and oil and provides a variety of energy marketing services. CNG also operates a liquefied natural gas (LNG) import and storage facility in Maryland.
- DEI is involved in merchant generation, energy marketing and risk management activities and natural gas and oil exploration and production.
- VPEM provides fuel and risk management services to Virginia Power and other Dominion affiliates and engages in energy trading activities.

Dominion purchased USGen, a company that held generating plants in New England that were formerly owned by New England Electric Power. It also purchased Louis Dreyfus which is involved in energy trading activities.

Dominion reports financial information in four operating segments: Dominion Delivery, Dominion Energy, Dominion Generation and Dominion Exploration & Production. The PJM assets are held in the Dominion Generation segment. Dominion Generation includes the generation operations of the electric utility and merchant capacity as well as energy marketing and risk management activities. The income for the generation segment is 20-30% of the total net income for Dominion as shown on the table below:

Year Ended December 31,	Net Income		
	2005	2004	2003
Dominion Delivery	448	466	453
Dominion Energy	319	190	346
Dominion Generation	402	525	512
Dominion Exploration & Production	565	595	415
Primary operating segments	1,734	1,776	1,726
Corporate	(701)	(527)	(1,408)
Consolidated	1,033	1,249	318
Generation Percent	23.2%	29.6%	29.7%

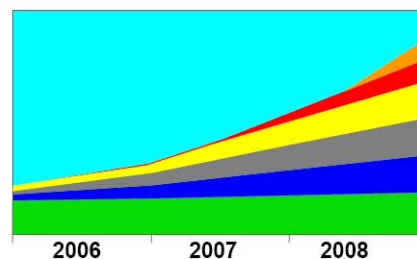
The chart below, from investor analyst presentations, illustrates that merchant plants provide a relatively small portion of Dominion's income, but the percentage is expected to increase. The increase, in turn, is comes from higher capacity prices in the NEPOOL market.

Financial Forecast

Structural Uplifts to Earnings

as of 5/22/2006

- A** Utility franchise growth
- B** E&P production
- C** E&P gross margin
- D** Merchant generation gross margin
- E** Virginia fuel reset
- F** Cove Point expansion



Illustrative only - not drawn to scale. Based on commodity prices as of April 28, 2006.

Generating Capacity

Most of the generating capacity owned by Dominion (63%) earns revenue under regulated rates. The remaining merchant generation consists of two nuclear plants, the portfolio of former New England Electric plants, two former ComEd coal plants with long-term contracts and three gas plants in PJM. The generating capacity of Dominion is summarized in the table below. The PJM capacity including the Kincaid plant is only 12.3% of the total generation capacity and the generating capacity segment makes up

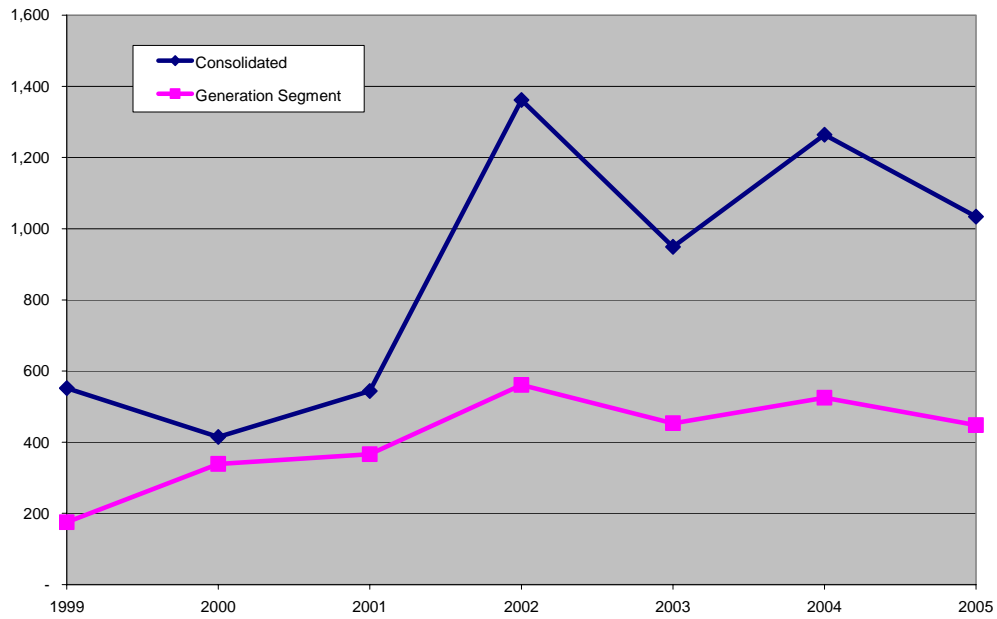
only 23% of the income of the company. This demonstrates that the PJM capacity is not a large component of the overall income of the company.

Plant	Location	Primary Fuel Type	Net Summer Capability -Mw	PJM Capacity	Pct of Merchant and Total
Utility Generation			15,515		
Merchant Generation					
Millstone	Waterford, CT	Nuclear	1,951		
Kewaunee	Kewaunee, WI	Nuclear	556		
Kincaid	Kincaid, IL	Coal	1,158	1,158	
Brayton Point	Somerset, MA	Coal	1,122		
State Line	Hammond, IN	Coal	515		
Salem Harbor	Salem, MA	Coal	314		
Morgantown	Morgantown, WV	Coal	25		
Salem Harbor	Salem, MA	Oil	440		
Brayton Point	Somerset, MA	Oil	438		
Fairless -CC	Fairless Hills, PA	Gas	1,076	1,076	
Elwood -CT	Elwood, IL	Gas	704		
Armstrong -CT	Shelocta, PA	Gas	625	625	
Troy -CT	Luckey, OH	Gas	600	600	
Manchester -CC	Providence, RI	Gas	432		
Pleasants -CT	St. Mary's, WV	Gas	313		
Other	Various	Various	17		
Purchased Capacity			10,294	3,459	33.6%
			2,244		
Total Capacity			28,053		12.3%

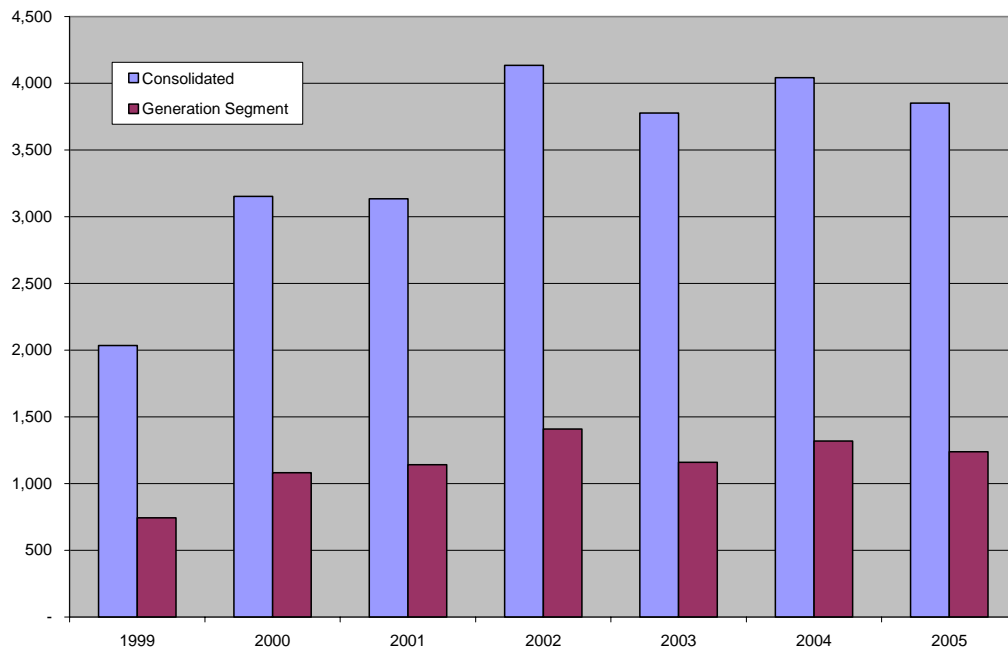
Historic Financial Performance

Dominion reports net income for each segment, but it does not issue comprehensive financial statements. The income and EBITDA from the generating segment has been relatively stable, as shown in the following graphs. Recall that most of the generating plants in this segment receive their income from regulated rates.

Dominion Net Income Components



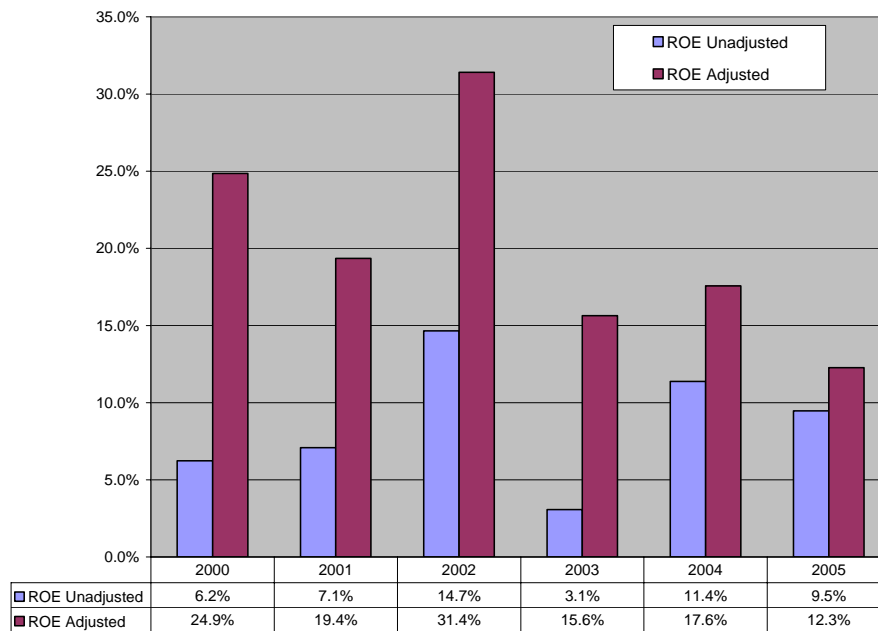
Dominion EBITDA



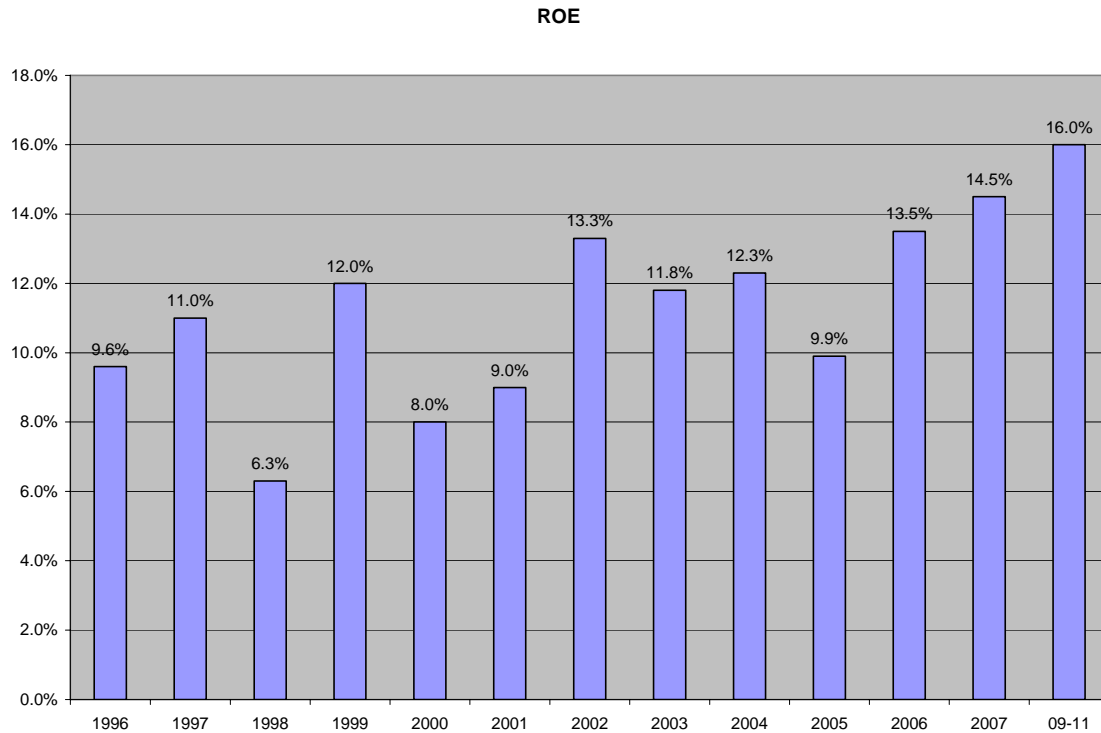
Dominion's return on equity on an adjusted and an unadjusted basis is shown below. The company has a relatively high return. However, one cannot determine which

segments are driving the return for the manner in which Dominion reports its financial statements. The adjusted return includes an item for acquisition costs of \$400 million and is also higher because Dominion has large amounts of goodwill on its balance sheet. The company has \$4.3 billion of goodwill and negative \$2.5 billion in accumulated other comprehensive income.

Dominion ROE



The return on equity reported by Value Line is similar to the unadjusted ROE and has ranged between 9% and 13.3% since 2001. The prospective returns are expected to increase due to its oil and gas exploration and production activities and insurance related to Hurricane Katrina.

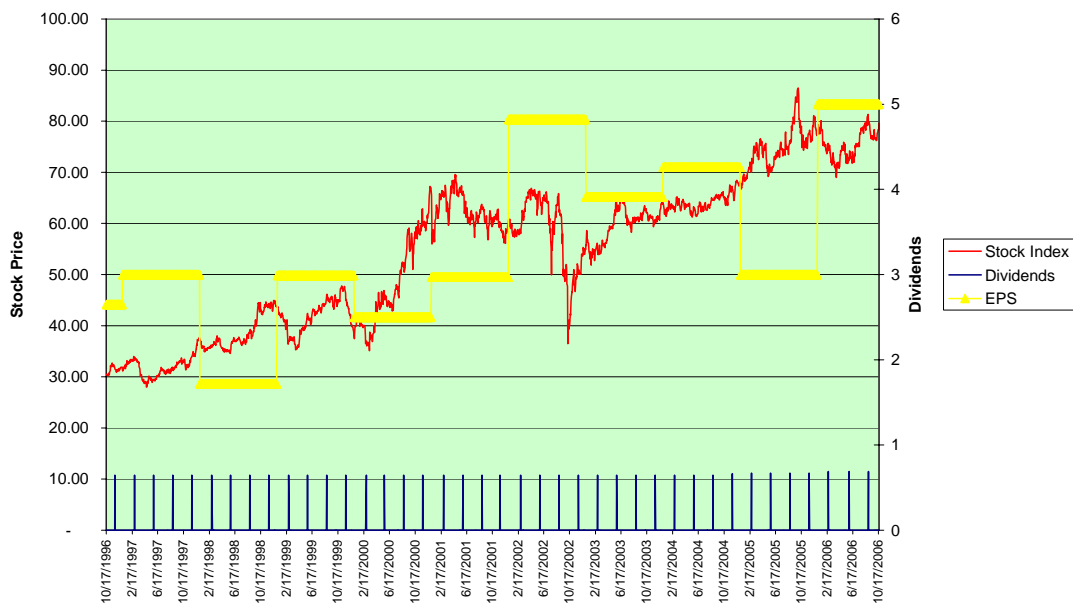


Dominion Holding Period Returns

Dominion's holding period returns have exceeded the regulated sample as shown in the graph below. However, the stock prices have not had the same patterns as the core PJM companies.

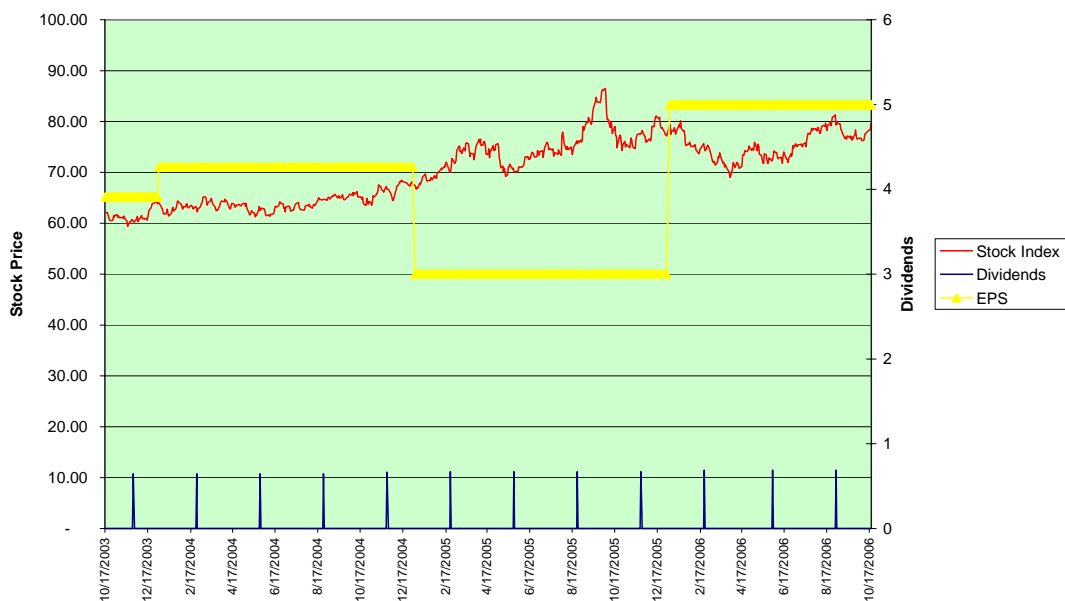
17-Oct-96 ▼

Dominion From: 17-October-96
Stock Price and Dividends
IRR over holding period 16.6%



17-Oct-03 ▼

Dominion From: 17-October-03
Stock Price and Dividends
IRR over holding period 12.7%



EXELON CORPORATION

Summary

Exelon has realized higher returns than other PJM companies and regulated companies over the period since retail and wholesale restructuring began approximately ten years ago. Specifically; (1) holding period returns measured from stock prices which have exceeded 20%; (2) unadjusted return on equity or return on equity which averaged 17.4%, and; (3) return on equity adjusted for write-offs, goodwill and other items which have recently been greater than 20%. Unlike other PJM companies, Exelon did not experience large losses on trading operations and it did not make large investments in foreign operations. This makes Exelon a good case study for analysis of retail and wholesale restructuring in PJM (although Exelon did incur losses for its investment in Sithe Energy, a merchant generation company). The historic adjusted returns on equity reveal that the company has fully recovered any stranded investment. Prospective earnings per share increases demonstrate that Exelon investors will realize even higher profits with expiration of bilateral contracts.

Company History and Structure

Exelon was formed in 2000 through a merger of Unicom Corporation (the former parent company of ComEd), and PECO, formerly named Philadelphia Electric Company. All of Exelon's assets are now held in one of these three subsidiary companies; two regulated distribution utilities, ComEd and PECO; and a subsidiary company named Exelon Generation, which holds its generating assets.

Exelon Generation earned more than 50% of the corporation's net income in 2006. The revenue, operating income and net income breakdown of the three subsidiary companies are shown in the table below.

Exelon 2006 Revenues and Income (Dollar amounts in millions)							
	Exelon	ComEd	Percent	PECO	Percent	Generation	Percent
Revenues	15,357	6,264	40.8%	4,910	32.0%	9,046	58.9%
Operating Income	3,954	1,218	30.8%	1,049	26.5%	1,852	46.8%
Net Income	2,153	545	25.3%	517	24.0%	1,098	51.0%
Notes: ComEd goodwill impairment added back to income.							
Percentages do not add to 100% because of consolidation adjustments							

Prospectively net income of Exelon Generation is projected to increase relative to transmission and distribution subsidiary companies because as bilateral contracts expire and stranded investment charges cease, less revenue and expenses, will be recorded in the ComEd and PECO subsidiaries. Exelon expects the generation subsidiary to earn more than 70% of the corporation's income in 2007.

Exelon's Generating Capacity

Exelon owns 25,009 MW of capacity which primarily consists of baseload capacity in PJM as summarized on the table below.

	Net Generation Capacity -MW	Percent
Nuclear - PJM	16,856	67%
Fossil - PJM	2,922	12%
Peaking and Hydro - PJM	2,833	11%
Non PJM Peaking	2,488	10%
Total	25,099	100%

Since 79% of Exelon's generation consists of lower fuel cost baseload capacity in PJM, the company profits from increased PJM energy prices set by peaking plants running on higher priced oil and natural gas.

Consolidated Financial Returns

The return on equity and return on invested capital for Exelon are affected by a series of write-offs, goodwill and accumulated other comprehensive income. The theory behind making these adjustments in evaluating stranded investment is explained in Appendix 1. Adjusted return on equity removes various items from income and the equity balance that would not be included in the computation of return on equity had the company remained regulated. These adjustments include:

- Removing the goodwill from the merger between Unicom and PECO
- Removing the write-off taken by PECO in 1997 that cut its book value in half
- Removing the write-off taken by ComEd for early retirement of the Zion nuclear plant
- Removing the write-off taken by ComEd for write-down on nuclear plants with the merger of PECO

The amount of the various adjustments is shown in the table below:

ComEd/PECO/Exelon Write-offs (\$ millions)	
Adjustment 1	
ComEd 1997 Nuclear Writeoff	1,373
Tax Effect	563
Net of Tax	810
Adjustment 2	
Zion 1997 Writeoff	886
Tax Effect	363
Net of Tax	523
Adjustment 3	
PECO 1997 Adjustment	3,108
Tax Effect	1,274
Net of Tax	1,834
Adjustment 4	
ComEd Writeoff with Merger in 2000	4,791
Tax Effect	2,157
Net of Tax	2,634
Adjustment 5	
Goodwill	5,051

Exelon's return on equity computed on an adjusted and an unadjusted basis is shown in the table below:

Return on Equity	2001	2002	2003	2004	2005	
Net Income for ROE						
Reported Net Income (Unadjusted)	1,428	1,440	905	1,864	923	
Net Income before Continuing Operations	1,416	1,670	793	1,841	951	
Adjustments						
Add: Goodwill Impairment	-	343	273	14	1,230	
Add: Sitch Writeoff Net of Tax	-	-	567	-	-	
Less: Depreciation Adj 1997 ComEd	20	20	20	20	20	
Less: Depreciation Adj 1997 PECO	46	46	46	46	46	
Less: Depreciation Adj 1997 Zion	13	13	13	13	13	
Less: Depreciation Adj 2000 Merger	66	66	66	66	66	
Adjusted Net Income for ROE	1,271	1,868	1,488	1,710	2,036	
Common Equity for ROE						
Reported Common Equity	8,102	7,742	8,503	9,423	9,125	
Average Common Equity	8,102	7,922	8,123	8,963	9,274	
Adjustments for Regulatory Comparison						
Less: Goodwill	5,335	4,992	4,719	4,705	3,475	
Add: ComEd 1997 Writeoff	709	689	669	648	628	
Add: PECO 1997 Writeoff	1,605	1,559	1,513	1,467	1,421	
Add: ComEd Zion Writeoff	457	444	431	418	405	
Add: 2000 Merger Adjustment	2,502	2,436	2,371	2,305	2,239	
Less: Accumulated Other Comprehensive In	(26)	(1,358)	(1,109)	(1,446)	(1,624)	
Adjusted Common Equity	8,066	9,236	9,876	11,002	11,967	
Average Adjusted Common Equity	8,066	8,651	9,556	10,439	11,485	Average
Unadjusted Return on Equity	17.6%	18.2%	11.1%	20.8%	10.0%	15.5%
Unadjusted without Goodwill Impairment	17.6%	22.5%	14.5%	21.0%	23.2%	19.8%
Adjusted Return on Equity	15.8%	21.6%	15.6%	16.4%	17.7%	17.4%
Value Line ROE	17.2%	20.1%	18.8%	19.5%	23.6%	19.8%

In the above chart, the row titled “Adjusted Return on Equity” is the most relevant for this study, and shows returns that range from 15.6% to 21.6%.

The return on invested capital and the cash flow ratios for Exelon are shown in the table below. The table demonstrates that Exelon’s return of 8.3% is above the weighted average cost of capital (the merger prospectus included estimates of Exelon’s weighted average cost of capital of 5.75% to 6.5%.)

Return on Invested Capital						
	2001	2002	2003	2004	2005	Average
Operating Income	3,362	3,299	2,277	3,433	2,724	
Add: Goodwill Impairment	-	343	273	14	1,230	
Add: Sithe	-	-	945	-	-	
Adjusted Operating Income	3,362	3,642	3,495	3,447	3,954	
Tax Rate	40%	40%	40%	40%	40%	
Adjusted Taxes	1,345	1,457	1,398	1,379	1,582	
Net Operating Income Less Adjusted Tax	2,017	2,185	2,097	2,068	2,372	
Invested Capital						
Adjusted Equity Capital	8,066	8,651	9,556	10,439	11,485	
Add: Interest Bearing Debt	14,645	15,744	15,760	13,551	13,964	
Less: Cash and Interest Bearing Securities	2,480	2,258	1,637	1,363	1,002	
Ending Invested Capital	25,191	26,653	26,953	25,353	26,451	
Average Invested Capital	25,191	25,922	26,803	26,153	25,902	Average
ROIC	8.0%	8.4%	7.8%	7.9%	9.2%	8.3%

Cash Flow Ratios						
EBIT	3,362	3,642	3,495	3,447	3,954	
Add: Depreciation	1,449	1,340	1,318	1,295	1,295	
EBITDA	4,811	4,982	4,813	4,742	5,249	
Average Investment	25,191	25,922	26,803	26,153	25,902	
EBITDA/Average Investment	19.1%	19.2%	18.0%	18.1%	20.3%	18.9%
Adjusted Net Income	1,271	1,868	1,488	1,710	2,036	
Add: Depreciation	1,449	1,340	1,318	1,295	1,295	
Add: Deferred Tax	(68)	278	(36)	202	496	
Cash Flow to Equity	2,652	3,486	2,769	3,207	3,827	
Average Adjusted Equity	8,066	8,651	9,556	10,439	11,485	
Cash Flow to Equity	32.9%	40.3%	29.0%	30.7%	33.3%	33.2%

Outlook and Prospective Returns

Exelon’s prospective earnings are affected by the expiration of bilateral contracts and PJM price changes. In a presentation to investors, Exelon explained that in 2006, out of 180,000 - 200,000 GWH supplied, 120,000 GWH is locked-up in bilateral contracts. In 2007, 80,000 GWH of the supply contracted to ComEd will be released from the contracts and convert to market pricing. Since the current bilateral contract has a price of \$35/MWH and market energy and capacity prices in PJM are much higher, the net profits to Exelon will increase. According to Exelon, “The Illinois Auction ... allow[s] it to capture the full market value of its Midwest generation portfolio.” This position is confirmed by investment analysts – for example Value Line states:

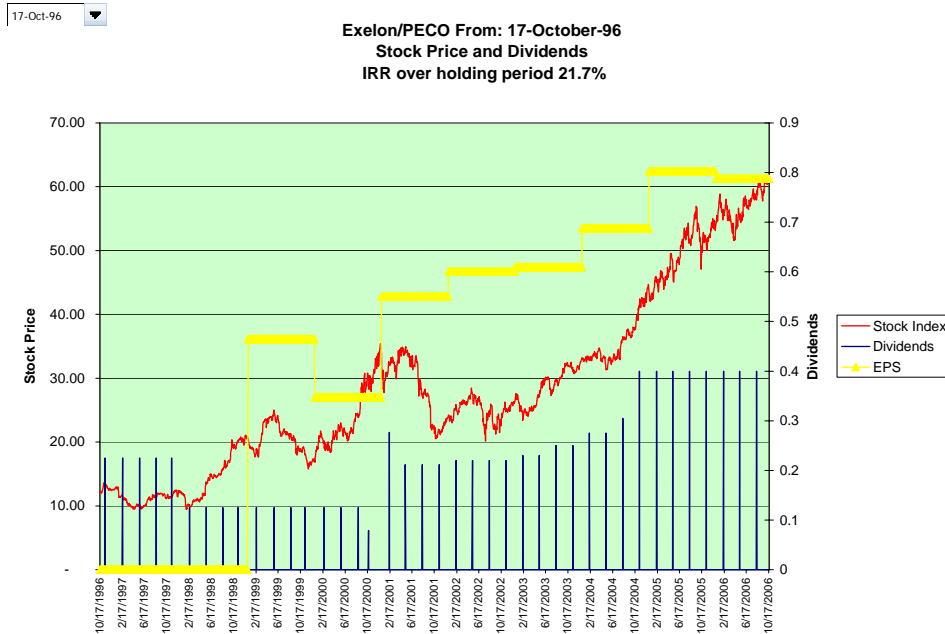
Exelon's sizable position in nuclear generation is very beneficial. These plants don't have the high price and volatility of gas ... and will benefit from rising market prices stemming from the higher costs of operating fossil plants.

The benefits of retail and wholesale restructuring to investors are encapsulated in the projected earnings. Value Line projects earnings per share to increase from \$3.31 per share in 2006 to \$5.00 in 2007. This is expected to produce a return on equity of 27.5%. Other analysts expect lower earnings as shown on the table below. The table summarizes how these projected earnings are converted to returns on equity using adjusted equity balance described above.

Exelon Market Capitalization					
Shares Outstanding	657				
Share Price at End of Study Period	\$ 62.05				
End of 2006 Share Price	\$ 61.89				
Common Equity on Balance Sheet (\$ Millions)					
Reported	9,125				
Adjusted	11,485				
Book Value per Share					
Reported	\$ 13.89				
Adjusted	\$ 17.48				
Market to Book Value - December 2006					
Reported	4.46				
Adjusted	3.54				
	2006	2007	2008	2009	2010
Prospective Return on Equity Using Adjusted Book Value per Share					
EPS - Base Case	3.23	4.35	4.44	4.54	4.64
EPS - Low Case	3.23	4.20	4.29	4.38	4.48
ROE - Base Case	17.6%	22.0%	21.1%	20.2%	19.5%
ROE - Low Case	17.6%	21.1%	19.8%	18.7%	17.8%

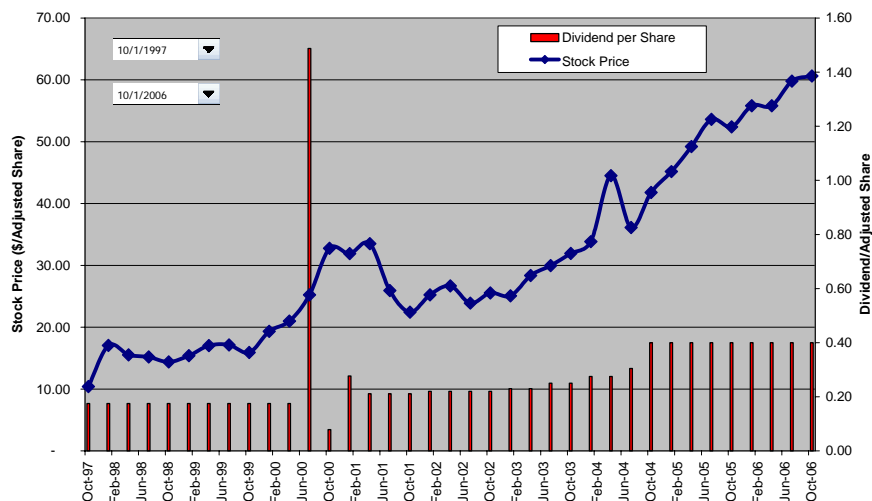
Holding Period Returns

Holding period returns have been computed from the perspective of a shareholder who originally held PECO shares before the 2000 merger and from the perspective of a shareholder who originally held Unicom shares. The method used to account for share splits, the exchange ratio in the merger and dividends are explained in Appendix 2. The 10-year return illustrates the cumulative return since before de-regulation and the three-year return illustrates returns since the energy price increases.



The graph below shows how the earnings for holders of shares in ComEd rather than from the PECO side, assuming that an investor purchased a share just before implementation of retail restructuring in Illinois.

Unicom/Exelon Stock Price and Dividends
Adjusted for Exchange Ratio in Merger and Stock Splits
Annual IRR of 28.0%



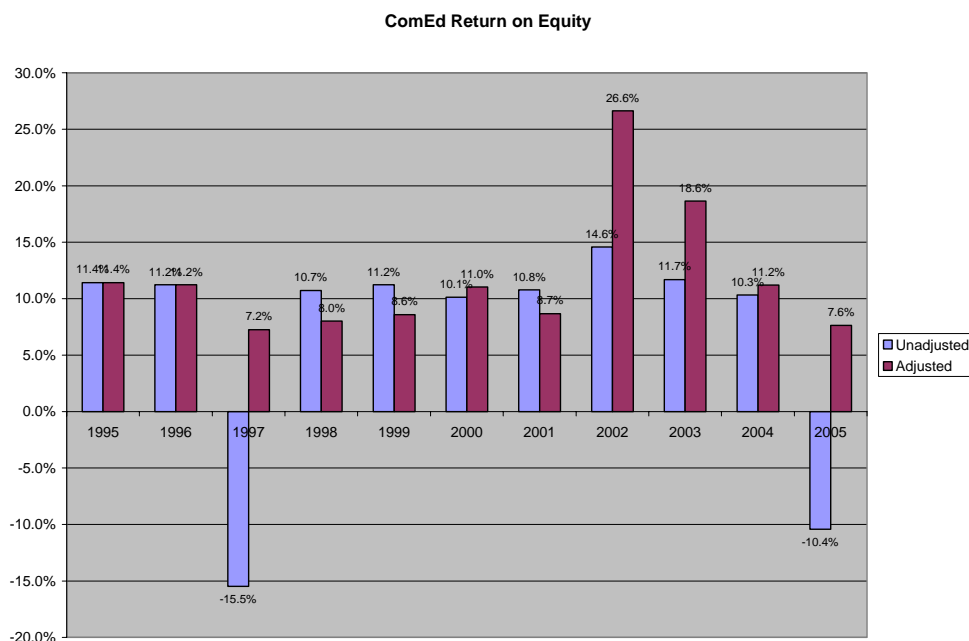
Segment Returns

Exelon presents financial statements for its Exelon Generation, PECO and ComEd segments. Analysis of the segments provides background on the retail restructuring that has affected to company's profit. Determining the profitability of each of the three Exelon segments requires an investigation of the write-offs discussed above.

ComEd Historic Performance

ComEd's energy delivery business consists of the purchase and regulated sale of electricity and distribution and transmission services to retail and wholesale customers in northern Illinois, including the City of Chicago. At the end of 1997 the Illinois legislature passed the electric competition and consumer choice act of 1997, (the IL Act). Under the provisions of the IL Act, ComEd's rates were frozen for eight years and the Company transferred or sold all of its generation assets. The rate freeze was later extended for two years and expires on January 1, 2007. ComEd advocated and received approval for a controversial auction for the purchase of power to supply its retail customers. As a result, rates are estimated to increase by at least 22% after 2007.

The return on equity for ComEd is influenced by the plant write-offs and by the goodwill that was recorded from the ComEd/PECO merger. When the write-offs and the goodwill are adjusted, ComEd's return on equity shows a pattern of returns that were initially moderate but that increased in 2002-2003. These returns are significantly affected by the transfer of assets to Exelon Generation.



PECO Historic Performance

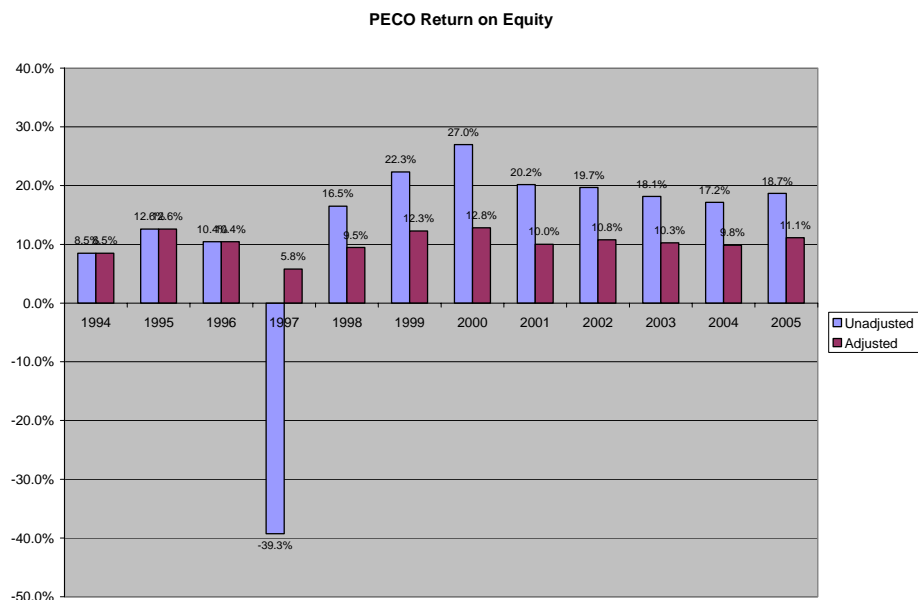
PECO's energy delivery business consists of the distribution and transmission services to retail customers in southeastern Pennsylvania, including the City of Philadelphia as well as the purchase and regulated sale of natural gas. Under the Pennsylvania Electricity Generation Customer Choice and Competition Act (PA Act), passed in 1998 the Company settled its restructuring case by establishing caps on generation and distribution rates (the 1998 settlement).

The 1998 settlement also authorized PECO to recover \$5.3 billion of stranded costs and to securitize up to \$4.0 billion of its stranded cost recovery, which was subsequently increased to \$5.0 billion.

As part of the 1998 settlement, PECO's distribution and transmission rates were capped through June 30, 2005 at the level in effect on December 31, 1996. Generation rates, which in addition to the cost of power, include a charge for stranded cost recovery and a shopping credit or capacity and energy charge, were capped through December 31, 2010. For 2005, the generation rate cap was \$0.0698 per kWh, increasing to \$0.0751 per kWh in 2006 and \$0.0801 per kWh in 2007. Under the settlement agreement entered into during the PECO / Unicom Merger, PECO agreed to \$200 million in aggregate rate reductions for all customers over the period January 1, 2002 through December 31, 2005 and extended the rate cap on distribution and transmission rates through December 31, 2006.

The rate freeze of PECO's distribution and transmission rates was recently extended through 2010. During the rate cap period, the the Pennsylvania Public Utilities Commission retained the right to lower PECO's rates if they are found to be excessive, and PECO retains the right to seek rate increases following certain events (such as significant increases in Federal or state income taxes or other significant changes in law or regulation that do not allow PECO to earn a fair rate of return).

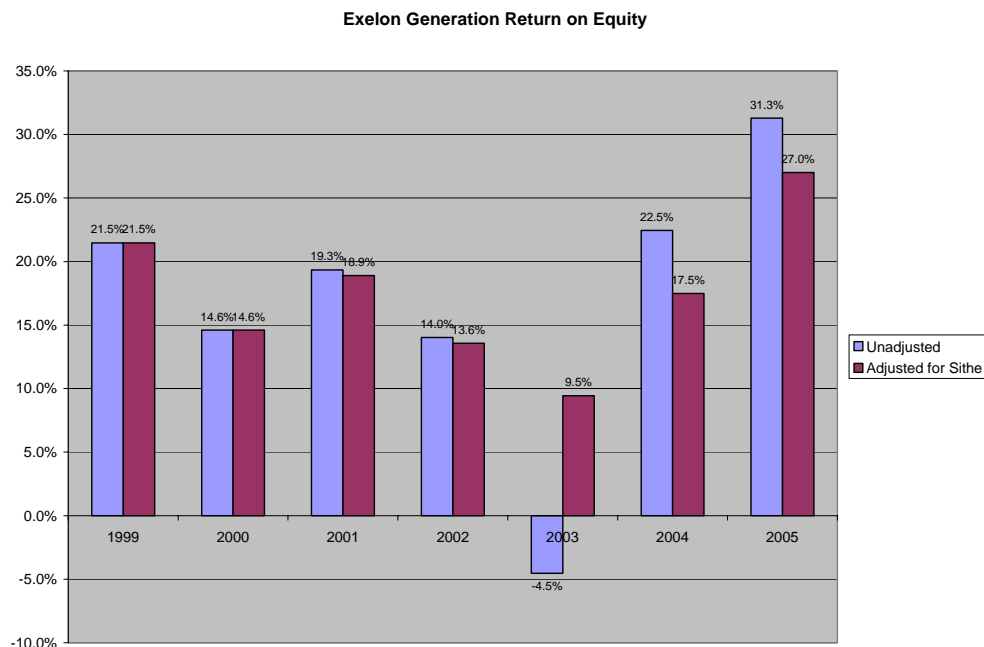
As with ComEd, PECO's return was highly influenced by the write-off of previously owned nuclear plants and the transfer of assets to Exelon Generation. After adjusting for the plant write-off, the returns are similar to the regulated utility sample.



Exelon Generation

Exelon Generation is one of the largest competitive electric generation companies in the United States, as measured by owned and controlled generation capacity (measured in Megawatt-Hours). The company owns plants with a capacity of 25,099 MW, including 16,856 MW of nuclear capacity. In addition, it controls another 8,191 MW of capacity through long-term contracts. Exelon Generation also has a wholesale marketing unit. In 2005 Exelon sold off its investment in Sithe Energies, Inc. (Sithe) to Dynegy. The owned generating resources of Exelon are located in the PJM-West (approximately 45% of capacity), PJM-East (approximately 44% of capacity), the Southern region (approximately 9%), and the Northeast region (approximately 2% of capacity). The 8,191 MWs of capacity that Generation controls through long-term contracts are in the Midwest, Southeast and South Central regions.

The financial performance of Exelon Generation has improved with higher energy prices. Exelon reports its “RNF”, which is revenue net of fuel expense. RNF has increased, allowing the company to realize higher profits as shown below.



FPL Group

Summary

FPL is composed primarily of regulated entities and a relatively small portion of its generating capacity is sold into PJM. Since most of FPL's revenues and income come from regulated operations, the financial statistics for FPL Group have characteristics of returns realized by regulated companies. FPL's wind capacity and its Seabrook investment affect its holding period returns, which have been higher than holding returns for the regulated portfolio.

History and Corporate Structure

FPL Group's segments include Florida Power & Light (FPL), a regulated utility, and FPL Energy, a non-rate regulated electricity generating subsidiary. FPL is a regulated utility in Florida with \$9.5 billion in revenues while FPL Energy earns \$2.2 billion in revenues. Less than 1% of total operating revenues were from foreign sources.

FPL Generating Capacity

FPL's capacity is shown in the table below. Most of FPL's capacity is regulated and most of the merchant capacity is located in regions other than PJM.

	MW	Pct of Merchant
Wind - Non-PJM	2,590	26.8%
Non-wind - Non-PJM	5,633	58.3%
<u>Total Non-PJM</u>	<u>8,223</u>	<u>85.2%</u>
Wind - PJM	129	1.3%
Non-wind PJM	1,305	13.5%
<u>Total PJM</u>	<u>1,434</u>	<u>14.8%</u>
<u>Total Merchant</u>	<u>9,657</u>	
Florida Capacity	19,056	
Grand Total Capacity	28,713	

FPL presents the valuation of generating plants in its investor analyst materials. The valuation of nuclear plants of \$2,126/kW is far above the book value and the stranded investment analysis made in earlier cases.

What is FPL Energy worth? An end of 2006 view....

FPL Energy Valuation Analysis: Year-end 2006P

Portfolio Element	Quartile	MW	\$/kW	Implied Enterprise Value
Wind	1	934	\$2,023	\$1,888
Wind	2	2,669	\$1,508	\$4,025
Wind	3	328	\$ 977	\$ 320
Wind	4	86	\$ 293	\$ 25
Nuclear	1	1,519	\$2,126	\$3,229
Hydro	1	361	\$2,023	\$ 730
Gas CC	1	4,997	\$ 741	\$3,702
Gas CC	2	556	\$ 196	\$ 109
Peakers	1	949	\$ 319	\$ 303
Peakers	2	50	\$ 196	\$ 10
All other		872	\$ 435	\$ 380
TOTAL		13,320		\$14,271



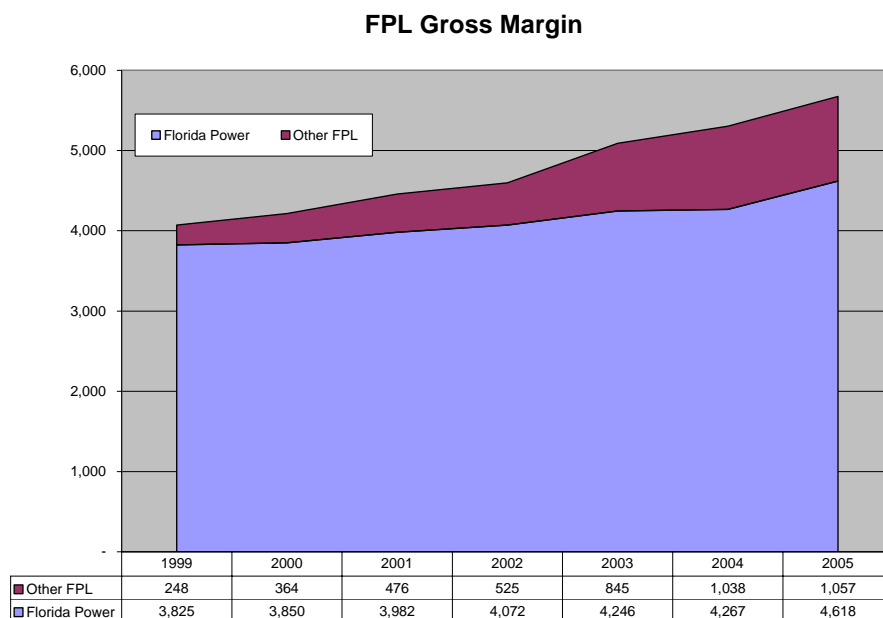
Based on Lehman Brothers August 1 report, "The Cheaper IPF", with hydro values applied to wind projects. MW figures may not total due to rounding. All \$ figures in millions unless noted

Historic Financial Performance

In evaluating the profit performance of FPL, we compare financial statistics for FPL's utility and the remainder of the company. The financial performance of FPL Group and its utility company subsidiary has been somewhat better than other regulated utilities. The return on equity for the utility has been between 12 and 13% as shown below. The write-off in 2002 is related to overpayments made by FPL for the generating assets of Central Maine Power.

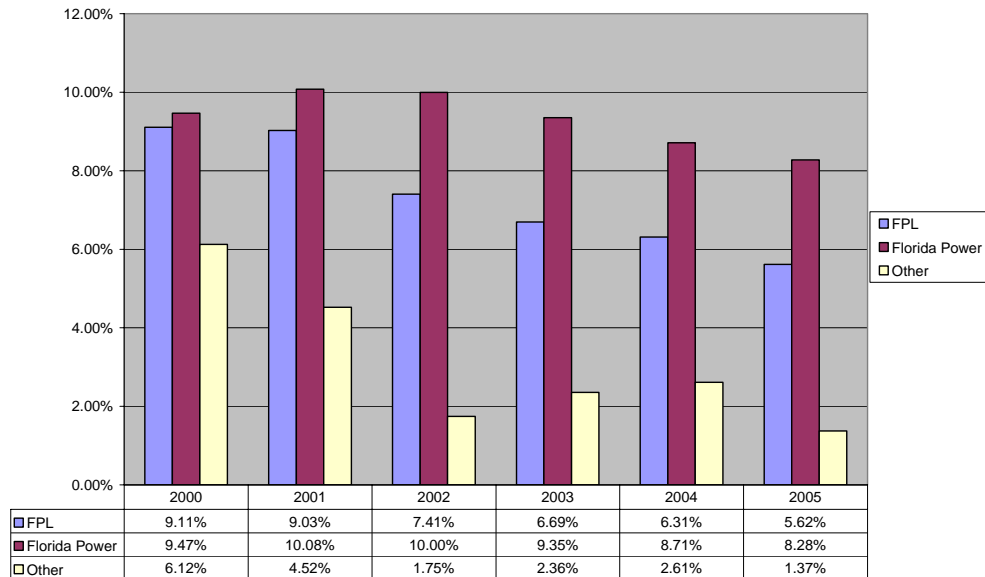
	2000	2001	2002	2003	2004	2005	Average
ROE Unadjusted							
FPL	12.6%	13.5%	7.6%	13.3%	12.2%	11.0%	11.54%
Florida Power	12.4%	13.2%	13.5%	13.3%	12.3%	11.6%	12.80%
Remainder	14.6%	15.4%	-32.8%	13.7%	11.7%	8.7%	3.32%
ROE Adjusted							
FPL	13.8%	14.0%	11.7%	13.5%	13.3%	13.6%	13.22%
Florida Power	13.6%	13.7%	13.5%	13.3%	12.3%	14.0%	13.38%
Remainder	15.5%	16.1%	27.6%	14.6%	18.3%	12.0%	17.72%
Value Line ROE		12.80%	10.70%	12.70%	11.80%	10.40%	11.68%
ROIC							
FPL	9.11%	9.03%	7.41%	6.69%	6.31%	5.62%	7.01%
Florida Power	9.47%	10.08%	10.00%	9.35%	8.71%	8.28%	9.28%
Remainder	6.12%	4.52%	1.75%	2.36%	2.61%	1.37%	2.52%
EBITDA/Investment							
FPL	25.1%	23.4%	19.0%	17.7%	17.1%	17.0%	18.84%
Florida Power	26.3%	26.2%	25.0%	24.1%	22.7%	23.2%	24.25%
Remainder	15.1%	11.3%	5.8%	7.3%	8.5%	7.1%	7.99%
Cash Flow/Adjusted Equity							
FPL	37.3%	29.3%	30.6%	38.8%	35.7%	35.7%	34.05%
Florida Power	38.2%	29.2%	32.9%	32.1%	36.5%	39.4%	34.01%
Remainder	29.4%	31.1%	42.9%	35.6%	42.4%	33.2%	37.05%
Equity to Capital							
FPL	60.0%	52.8%	46.5%	43.4%	46.2%	46.9%	47.17%
Florida Power	60.4%	64.2%	61.4%	61.8%	62.0%	59.9%	61.88%
Remainder	56.2%	19.6%	20.2%	15.2%	21.7%	25.7%	20.48%

FPL presents its financial statements on a consolidated basis and for the utility company subsidiary. The earnings and cash flow on the non-utility operations are computed by subtracting the utility amounts from the total. Most of the gross margin and cash flow has come from the utility company as shown in the following graph:



A measure of ROIC that removes the effect of debt leverage, shows that the Florida Power utility subsidiary has earned higher returns than the other segments of the company.

FPL ROIC

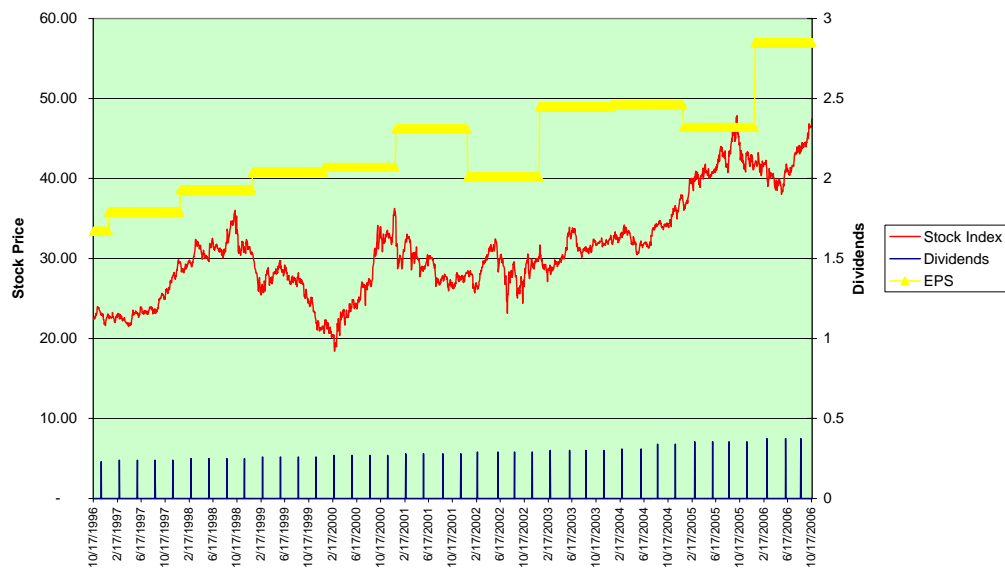


FPL Holding Period Returns

Over the past 10-years FPL has earned returns somewhat above regulated companies. The positive holding period returns are influenced by FPL's position in wind capacity and its non-PJM plants.

17-Oct-96

FPL From: 17-October-96
Stock Price and Dividends
IRR over holding period 11.7%



Midwest Generation (Edison International)

Summary

Financial analysis of Midwest Generation, a subsidiary owned by Edison International that operates coal-fired plants in Illinois, demonstrates the benefits received by holders of baseload capacity with the expiration of coal plant power contracts. The most pertinent financial ratio for the company is the return on invested capital because of changes in the way the company financed its operations. Before expiration of bilateral contracts with ComEd, Midwest Generation's returns on invested capital were very low – between 1.4% and 2.7%. However, in 2005 when the bilateral contracts expired, the return increased to 7.4%. Holding company returns for Edison International, the parent of Midwest Generation, are not of much use in assessing retail and wholesale restructuring issues because the company's operations encompass much more than PJM generating plants.

When ComEd sold plants to Midwest Generation, it realized a gain of \$1.6 billion that was not translated into lower consumer rates. If Midwest Generation ultimately re-coups its investment through earning a return equal to or greater than the cost of capital, ratepayers will have paid more than they would had the plants remained regulated. In this scenario, both ComEd and Midwest Generation investors benefit relative to a situation in which revenues are determined from the book value of plants and the cost of capital. The recent return on invested capital earned by Midwest Generation implies that this scenario is indeed taking place.

Company History and Corporate Structure

The generating plants that sell power into PJM owned by Edison International are held in its Midwest Generation subsidiary. This company files separated SEC 10-K reports but does not have a traded stock price. Edison International also owns Southern California Edison and many other non-regulated plants. The financial performance of Southern California Edison overwhelms the finances of Midwest generation and the profit measures of the company on a consolidated basis was strongly affected by the California power crisis of 2000-2001. Given the influence of the California power crisis on the financial results of Edison International, this analysis concentrates on Midwest Generation financials.

Midwest Generation was formed from the December, 1999 sale by ComEd of its fossil generating assets to Edison Mission Energy, a subsidiary of Edison International. Midwest generation paid \$4.9 billion for an aggregate generating capacity of approximately 9,772 megawatts, equal to a value of \$501 per kW. If the oil-fired capacity that was retired is not included, the value was \$834/kW. The sale produced a gain of approximately \$1.6 billion after-tax and \$2.587 billion pre-tax to ComEd, after it recognized commitments associated with coal contracts (\$350 million), employee-related

costs (\$112 million) and contributions to the environmental trust. ComEd used complex accounting to avoid booking the gain in a single year by recording the pre-tax gain of \$2.587 billion as a regulatory liability. In connection with the acquisition of the Illinois Plants, Midwest Generation entered into three separate five-year power purchase agreements with Commonwealth Edison, which were subsequently assigned to its affiliate, Exelon Generation.

Midwest Generation Capacity

As of December 31, 2005, Midwest Generation owned or leased 5,876 MW of operating power plants. In April 2004, Midwest Generation permanently ceased operations at the Collins Station which had more than 3,000 MW. The difference between the 9,772 MW and the 5,876 MW is the result of the retired capacity. The capacity currently owned by Midwest Energy is summarized in the table below. Virtually all of the capacity consists of coal-fired plants in Illinois.

Operating Plant or Site	Location	Fuel	Megawatts
Electric Generating Facilities			
Crawford Station	Chicago, Illinois	coal	542
Fisk Station	Chicago, Illinois	coal	326
Joliet Unit 6	Joliet, Illinois	coal	290
Joliet Units 7 and 8	Joliet, Illinois	coal	1,044
Powerton Station	Pekin, Illinois	coal	1,538
Waukegan Station	Waukegan, Illinois	coal	789
Will County Station	Romeoville, Illinois	coal	1,092
Peaking Units			
Fisk	Chicago, Illinois	oil/gas	163
Waukegan	Waukegan, Illinois	oil/gas	92
Total			5,876

Midwest Generation realized an increase in the average energy price earned by its generation and a higher capacity factor in 2005. The price realized by Midwest Generation related to the coal-fired units on a merchant basis was \$46.68/MWh in 2005, \$24.84/MWh in 2004 and \$22.27/MWh in 2003. During 2004 and 2003, 56% and 49% of the total generation from the Illinois plants was merchant plant generation, respectively. The remaining 2004 and 2003 generation was sold under the power purchase agreements with Exelon Generation, which provided for higher capacity payments and lower payments for energy (with an average energy price of \$17.46/MWh in 2004). The company states that average energy prices increased in 2005, as compared to 2004 and 2003, driven primarily by higher natural gas prices and the elimination of lower contract energy prices set forth in the Exelon Generation power purchase agreements.

Financials for Midwest Generation are reported in a manner by which one can analyze the price received for power, the operating and maintenance per kW per year and other statistics for coal capacity sold into PJM. The price received and the non-fuel operating and maintenance are shown on the table below:

	2000	2001	2002	2003	2004	2005
Gross Margin						
Revenues	1,089,207	1,057,482	1,148,677	1,052,256	1,057,764	1,429,385
Fuel	404,020	354,425	396,345	401,153	407,264	383,746
Gross Margin	685,187	703,057	752,332	651,103	650,500	1,045,639
Generation	26,627	26,627	27,574	27,510	30,568	30,953
Capacity Factor	51.7%	51.7%	53.6%	53.4%	59.4%	60.1%
Price per MWH	40.91	39.71	41.66	38.25	34.60	46.18
Fuel/MWH	15.17	13.31	14.37	14.58	13.32	12.40
Non-Fuel O&M Cost	341,915	402,000	349,328	333,012	378,493	350,708
Capacity	5,876	5,876	5,876	5,876	5,876	5,876
Non-Fuel O&M Cost - \$/kW/Yr	58.2	68.4	59.4	56.7	64.4	59.7

Historic Financial Performance

The net income of Midwest Generation has been affected by write-offs associated with a large oil-fired plant that was purchased from ComEd and then retired. Midwest Generation management concluded that the oil-fired Collins Station was not economically competitive in the marketplace given the generation overcapacity in the region and it ceased operations effective September 30, 2004. The plant was retired in 2004. Midwest booked a \$1.025 billion loss in 2003 related to the impairment of the Collins Station and eight small peaking units. Midwest Generation recorded asset impairment charges of \$780 million (\$475 million after tax) for the Collins Station and \$245 million (\$150 million after tax) for all eight of the small peaking units that resulted from a revised long-term outlook for capacity revenues. The lower capacity revenue outlook was the result of a number of factors, including higher long-term natural gas prices and generation overcapacity.

The manner in which Midwest Generation is financed has resulted in a below investment grade credit rating. Therefore, return on equity is distorted and a more appropriated statistic to evaluate performance over time is the return on invested capital. Credit ratings for Midwest Generation are shown in the table below. The company has had a below investment grade rating.

	Moody's Rating	S&P Rating
Edison Mission Energy	B1	B
Midwest Generation, LLC:		
First priority senior secured rating	Ba3	B+
Second priority senior secured rating	B1	B-
Edison Mission Marketing & Trading	Not Rated	B

Financial analysis of Midwest Energy demonstrates the improvement in the profitability of coal plants that has come with the increased PJM energy prices. In 2005, Midwest Generation realized higher profits due to increased prices as the bilateral

contract with ComEd expired. The financial ratios for Midwest Generation are affected by transactions between the company and its parent that affected the common equity on the balance sheet. Changes in the capital structure have made the return on equity measure difficult to interpret. The common equity ratio and the return on equity are shown on the graphs below. The higher profits are illustrated by review of the gross margin and the EBITDA as shown on the table below:

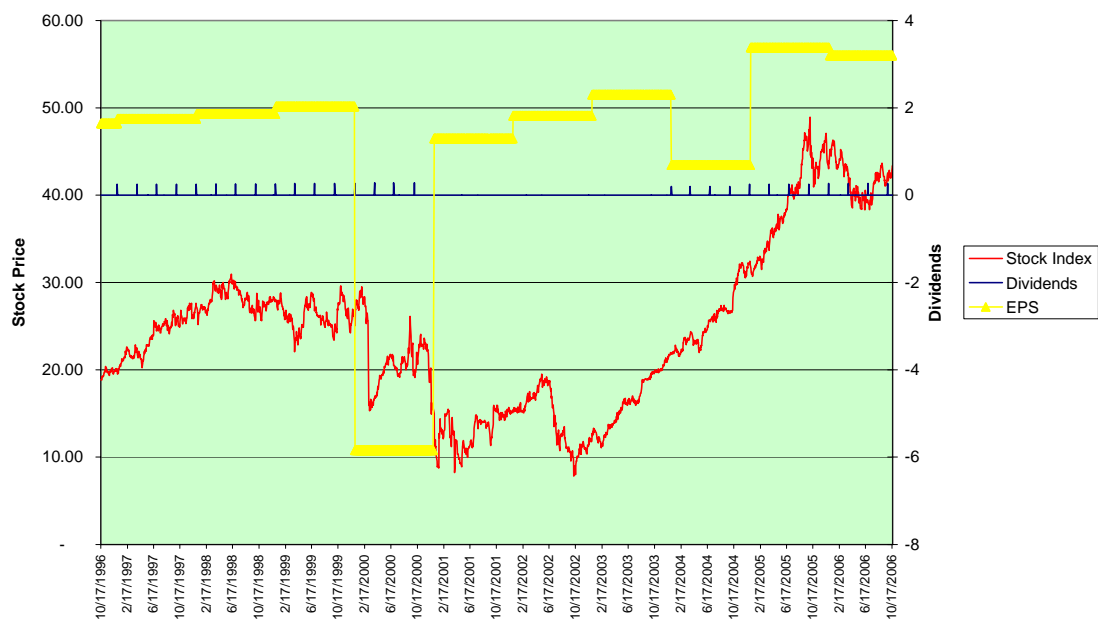
	2000	2001	2002	2003	2004	2005	Average
Profit For Computing ROIC							
EBIT	153,190	104,179	201,974	133,092	106,366	596,284	
Tax Rate	40%	40%	40%	40%	40%	40%	
NOPLAT	91,914	62,507	121,184	79,855	63,820	357,770	
Depreciation	167,686	166,718	175,631	171,714	169,921	141,129	
EBITDA	320,876	270,897	377,605	304,806	276,287	737,413	
Deferred Tax	5,969	44,038	16,479	(402,458)	(55,174)	109,265	
Cash Flow	77,281	113,092	175,967	105,921	140,784	559,751	
Investment Balance							
Equity	549,900	463,533	457,291	332,073	2,362,422	2,517,657	
Average Equity	549,900	506,717	460,412	394,682	1,347,248	2,440,040	
Less: Accumulated Comprehensive Income	-	-	(999)	1,906	5,441	(110,290)	
Adjusted Equity	549,900	463,533	457,977	1,355,186	3,486,652	3,764,641	
Average Adjusted Equity	549,900	506,717	460,755	906,582	2,420,919	3,625,647	
Debt	5,757,759	5,905,503	5,596,681	4,951,444	2,984,489	2,753,726	
Cash and Investments	1,817,308	1,895,227	1,447,757	1,469,308	1,549,721	1,814,186	
Adjusted Investment for ROIC	4,490,351	4,473,809	4,606,901	4,837,322	4,921,420	4,704,181	
Average Investment	4,490,351	4,486,216	4,511,218	4,631,233	4,800,741	4,846,086	
ROIC	2.0%	1.4%	2.7%	1.7%	1.3%	7.4%	2.9%
EBITDA/Investment	7.1%	6.0%	8.4%	6.6%	5.8%	15.2%	8.4%
Cash Flow/Equity	14.1%	22.3%	38.2%	11.7%	5.8%	15.4%	18.7%
ROE Unadjusted	-17.5%	-19.3%	-3.4%	-174.5%	-5.8%	12.3%	-38.1%
ROE Adjusted	-17.5%	-19.3%	-3.5%	37.1%	1.1%	8.5%	4.8%

Holding Period Returns

Holding period returns can only be computed for Edison International as a holding company. The graph below shows that returns and stock prices were affected by the California crisis in 2000 and 2001.

17-Oct-96

EIX From: 17-October-96
Stock Price and Dividends
IRR over holding period 11.6%



Mirant

Summary

Mirant purchased 2,740 MW from PEPCO in 2000 for \$5.1 billion. The financial performance of Mirant's PJM assets is affected by bilateral contracts between PEPCO and Mirant and by litigation between the two companies that resulted from Mirant's bankruptcy. Because of distortions in Mirant's equity balance caused by its bankruptcy, the financial analysis is best measured through analysis of the return on total invested capital instead of the return on equity. Even though the asset purchase from PEPCO was more than book value, Mirant has realized an average return on invested capital of 6.8% on its PJM capacity over the period since the assets were purchased.

The Mirant case demonstrates that profits from base load capacity in PJM have been higher than profits realized on new gas fired combined cycle and combustion turbine capacity realized elsewhere in the country. Since Mirant's stock was not re-listed until the start of 2006, one cannot compute holding period returns for the company. Analysis of merchant companies such as Mirant is more difficult than analysis of core PJM companies like Exelon. To evaluate costs and benefits from restructuring, three parties must be analyzed. For example, if a utility company sells its plants to a merchant company for a very high price and ratepayers do not receive credit for the gain on the sale, it is possible that utility shareholders are better-off, merchant investors are worse off and ratepayers are indifferent. On the other hand, if both merchant investors and utility investors benefit, then ratepayers are worse off.

Company History and Corporate Structure

Mirant was named Southern Energy Inc. when it purchased assets from PEPCO and was originally a wholly owned subsidiary of Southern Companies, a large vertically owned utility company. Mirant was spun-off to shareholders and had its own listed shares in 2001. Mirant has major operations in three areas of the world – U.S., Caribbean and Philippines. The U.S. operations are booked in a standalone company and the PJM assets are also kept in a separate subsidiary company which reports its results on a standalone basis.

The U.S. portion of Mirant declared bankruptcy in July 2003. The company remained in bankruptcy until January 2006. (In contrast NRG's bankruptcy lasted less than one year.) In gauging the profitability of Mirant, the bankruptcy causes difficulty. First, one cannot evaluate stock price over a long period because the stock price was de-listed with the bankruptcy. Second, the return on equity measures for Mirant are heavily influenced by write-offs of goodwill and other accounting adjustments from the bankruptcy. Mirant states there is "lack of comparable financial data" in financial reports "due to the restructuring of our business and the adoption of fresh-start reporting." With Mirant's bankruptcy, the company attempted to get out of power contracts with PEPCO, so that it could have the opportunity to charge higher un-regulated rates than the prices in

the contract. The settlement of this dispute has affected the profit of both Mirant and PEPCO.

Since Mirant prepares financial statements for its PJM operations, these financial results are the focus of the analysis. The PJM assets of Mirant primarily come from the purchase of PEPCO generation assets in 2000. The subsidiary began to report results toward the end of 2000. In PJM, Mirant supplied PEPCO for the full load requirement in the District of Columbia under a transition power agreement which expired in January 2005. There was a similar agreement in place to supply PEPCO's load in Maryland, which expired in June 2004. Mirant also participated in standard offer service auctions in Maryland and Washington, D.C.

Mirant's Generating Capacity

The PJM plants owned by Mirant are located in Maryland and Virginia and were acquired from PEPCO in December 2000. Mirant reports four generation plants with 5,256 megawatts ("MW") of electric generation capacity in the Washington, D.C. area. The Mirant PJM capacity is different from the capacity outside of PJM. 91% of Mirant's coal capacity is in PJM while only 11% of the oil and gas capacity is in PJM. Outside PJM, most of the capacity is gas and oil peaking or combined cycle as shown on the two tables below.

Total Capacity				
	PJM	Non-PJM	Mirant	PJM Pct
Coal	4,179	411	4,590	91.0%
Gas/Oil	1,077	8,530	9,607	11.2%
Total	5,256	8,982	14,238	36.9%

Mirant reports the energy generation and capacity factor as follows which can be used to derive the realized revenue per MWH. An analysis of revenues realized and costs incurred by Mirant are shown in the table below.

Mirant Mid-Atlantic				
	2005	2004	2004	2003
Revenues	1,197	1,022	856	947
Generation	16,572	16,463	16,463	16,884
Revenue per MWH	72.23	62.08	52.00	56.09
Capacity Factor Percent	44	44	45	
Cost of Fuel	742	521	456	346
Fuel Cost/MWH	44.77	31.65	27.70	20.49
Gross Margin	455	501	400	601
Operations and Maintenance	242	233	186	167
O&M per MWH	14.60	14.15	11.30	9.89

Historic Financial Analysis

In evaluating financial returns, we focus on how the PJM segment compares with other portions of the company. The gross margin and EBITDA for the PJM and relative to other segments show that Mirant's PJM operations have been higher and more stable than the rest of the company. This is demonstrated by the return on capital, the gross margin and the EBITDA shown below.

	2000	2001	2002	2003	2004	2005
Gross Margin						
Mirant World Wide	1,788	2,964	2,222	1,974	1,952	1,754
Mirant US	860	1,886	961	1,097	1,128	881
Mirant PJM	150	490	469	400	501	455
US - Non PJM	710	1,396	492	697	627	426

	2000	2001	2002	2003	2004	2005
EBITDA						
Mirant World Wide	1,180	1,904	1,489	891	951	766
Mirant US	392	870	403	291	202	(10)
Mirant PJM	152	283	200	188	200	159
US - Non-PJM	240	587	203	103	2	(169)

The ROE on the PJM segment remained positive even during the bankruptcy and even with the litigation issues associated with PEPCO. The return on invested capital, the ROE and other statistics for the Mirant segments are shown on the table below.

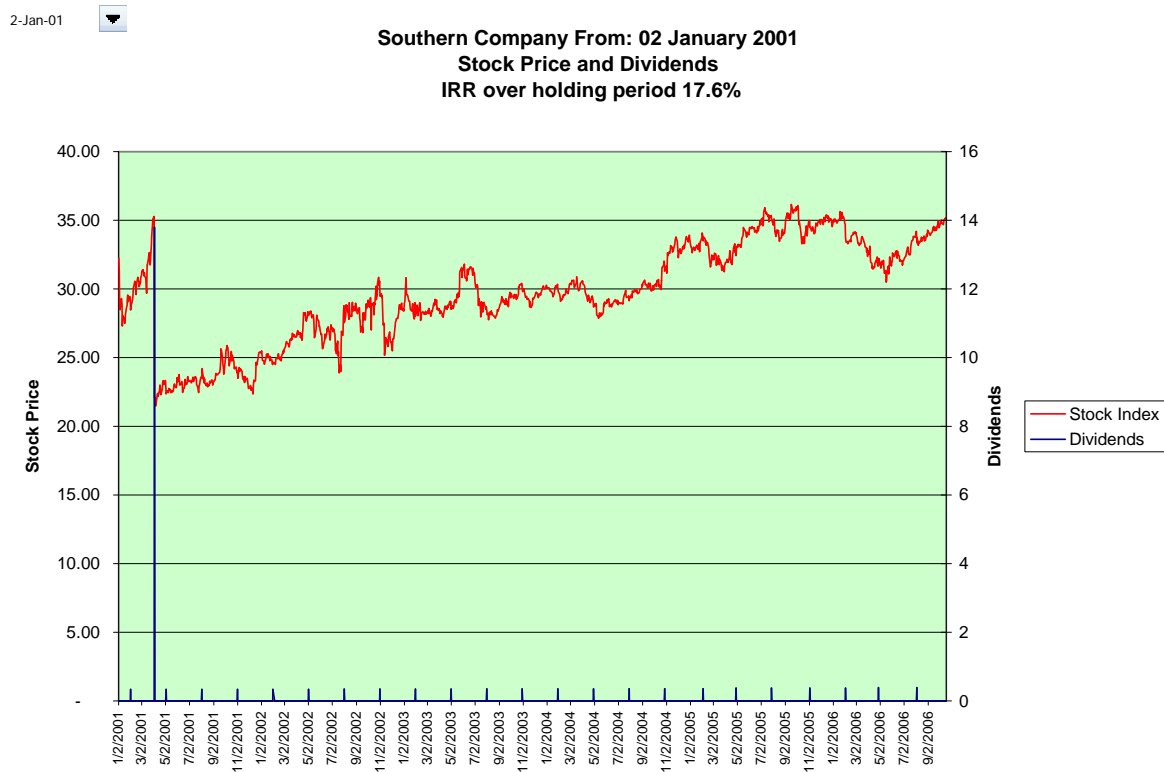
	2000	2001	2002	2003	2004	2005
ROIC						
Mirant World Wide	5.9%	10.2%	9.0%	3.4%	2.5%	1.7%
Mirant US	5.4%	11.9%	5.0%	2.1%	1.2%	-2.5%
Mirant PJM	7.8%	10.8%	8.2%	6.0%	5.3%	3.4%
EBITDA/Investment						
Mirant World Wide	12.08%	19.49%	17.17%	8.43%	5.75%	4.48%
Mirant US	10.20%	22.63%	10.55%	7.50%	4.99%	-0.27%
Mirant PJM	12.24%	22.79%	16.41%	13.61%	11.88%	8.83%
Cash Flow/Investment						
Mirant World Wide	13.81%	20.42%	28.40%	8.87%	6.05%	4.50%
Mirant US	9.62%	19.77%	8.40%	8.92%	5.02%	-0.57%
Mirant PJM	12.24%	22.79%	16.41%	13.61%	11.88%	8.83%
ROE Unadjusted						
Mirant World Wide	8.21%	8.82%	-59.37%	-359.76%	44.47%	-102.99%
Mirant US	5.46%	14.64%	5.05%	-1753.55%	-160.61%	-413.26%
Mirant PJM	0.18%	5.72%	5.82%	-14.53%	3.65%	0.23%
ROE Adjusted						
Mirant World Wide	13.3%	19.8%	-4.7%	-9.9%	-29.1%	17.6%
Mirant US	5.5%	14.6%	6.3%	-88.0%	-65.2%	-413.8%
Mirant PJM	0.2%	5.8%	5.9%	1.9%	3.4%	1.1%

Mirant's profits will be influenced by capacity prices as the plants have relatively low capacity factor. In its comments on the RPM proposal, Mirant stated that " the new RPM

would result in increased opportunities for generators to receive more revenues for their capacity.”

Holding Period Returns

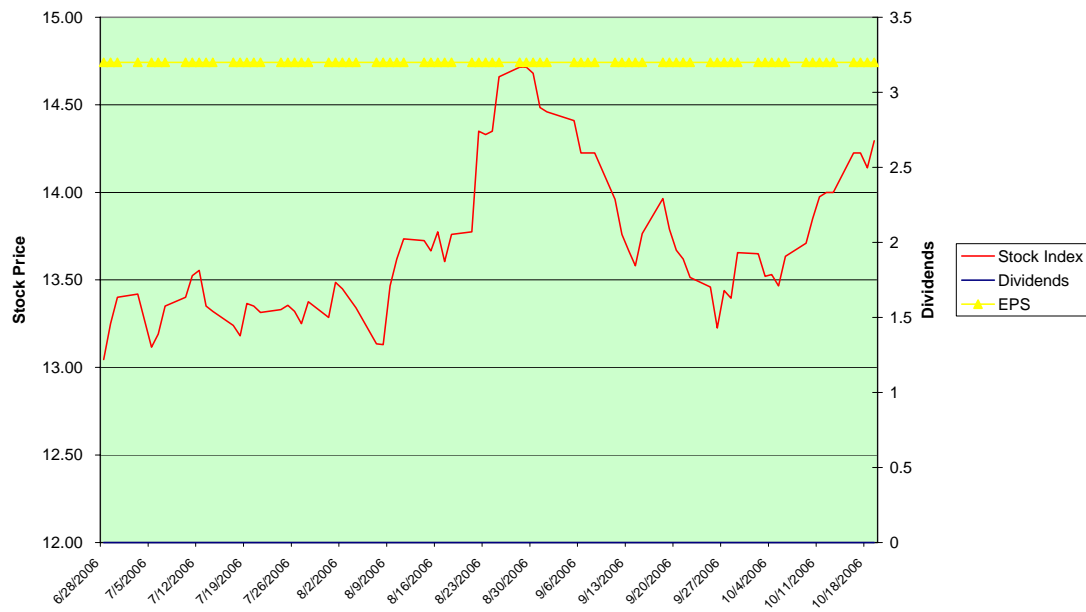
Mirant was created from a spin-off of Southern Company. The shareholders who owned Southern received a special dividend when Mirant was spun-off to shareholders. If a shareholder of Southern held Mirant shares, the shareowner would still be better-off today than at the time of the spin-off.



Since Mirant has come out of bankruptcy, it has experienced a positive return of 34% as shown in the graph below.

28-Jun-06

MIR From: 28-June-06
Stock Price and Dividends
IRR over holding period 34.4%



NRG Energy

Summary

NRG is a merchant company with a relatively small portion of its capacity in PJM. NRG does not separate its reporting for PJM relative to other portions of the company, but its income from the northeast region of the US has been higher and more stable than for other regions of the company. The company declared bankruptcy and then emerged from bankruptcy. Holding period returns, computed from the date at which the company emerged from bankruptcy in 2003, have been high since then. The NRG case study does not provide much insight into policy issues in PJM.

Company History and Structure

NRG was formed in 1992 as the non-utility subsidiary of Northern States Power Company. The company states that it “pursued an aggressive high growth strategy focused on power plant acquisitions, high leverage and aggressive development. In 2002, a number of factors, “including the aggressive prices paid for our acquisitions of turbines, development projects and plants, combined with the overall downturn in the power generation industry, triggered a series of credit rating downgrades which, in turn, precipitated a severe liquidity crisis...” From May 14 to December 23, 2003, NRG was bankrupt. NRG does not separately report profit for its PJM plants.

NRG Generating Capacity

NRG owns 24,580 MW of capacity of which only 6% or less than 1,500 MW is in PJM. In PJM, NRG company has one large coal plant with a capacity of 773 MW in Delaware. The PJM capacity includes somewhat more baseload coal capacity than other capacity as shown on the table below.

	Base Load	Other	Total	Percent
PJM	864	611	1,475	6.0%
Non-PJM	9,726	13,379	23,105	94.0%
Total	10,590	13,990	24,580	100.0%

NSP displays its capacity on a regional basis in its presentations to investors.

Historic Financial Performance

The historic analysis of NRG is affected by its bankruptcy in 2003. As a result of the emergence from bankruptcy, it adopted Fresh Start Reporting which involves re-valuation of many assets. This accounting confirmed enterprise value was allocated to NRG’s assets and liabilities based on their respective fair values.

NRG presents its EBITDA by segment in presentations to financial analysts. But these segments are not part of the financial statements. Income from the Northeast

segment was higher than income from other segments of the company. According to NRG, in the Northeast, “commodity prices are more volatile on an as-delivered basis than in other regions due to the distances and occasional physical constraints impacting delivery of fuels into the region.” Most of NRG’s generation in the Northeast is coal based even though most of the company’s total capacity is not coal.

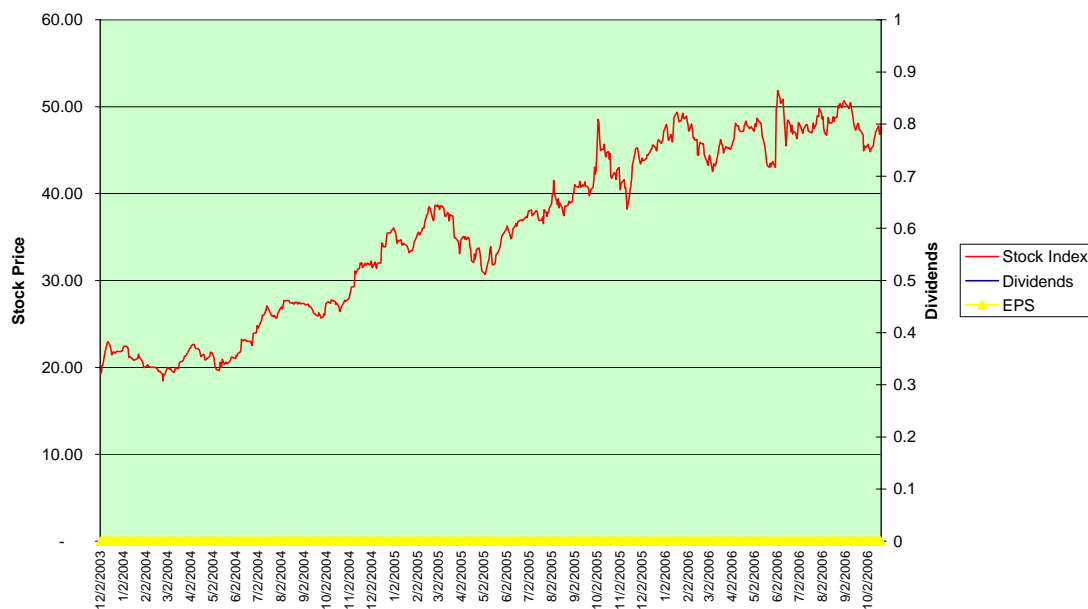
NRG’s bankruptcy resulted in the equity to capital falling below zero and affected computation of the return on equity. The equity base then increased with the re-start accounting. The return on invested capital has been low and has put pressure on the NRG debt. This measure is less distorted than the return on equity. The table below shows that NRG’s return on invested capital has increased in 2004 and 2005 relative to very low levels in earlier years.

Return on Invested Capital	1998	1999	2000	2001	2002	2003	2004	2005	Average
Revenues	182	433	1,810	2,411	2,281	1,935	2,348	2,708	
EBITDA	82	153	575	768	516	488	809	548	
Depreciation	37	123	97	170	256	223	208	194	
EBIT	45	30	478	598	260	265	601	354	
Tax Rate	35%	35%	35%	35%	35%	35%	35%	35%	
NOPLAT	29	20	311	389	169	172	391	230	
Deferred Tax			38	46	(230)	(5)	57	2	
Cash Flow	82	153	614	813	286	483	866	550	
Invested Capital									
Adjusted Equity	914	914	1,544	2,270	(679)	2,339	2,322	2,179	
Total Debt	-	2,362	3,820	8,353	9,446	4,440	3,555	2,763	
Less: Cash and Investments		192	261	1,025	2,398	1,590	1,778	1,028	
Invested Capital	3,084	3,084	5,103	9,599	6,369	5,189	4,099	3,914	
Equity Capital	650.00	893.65	1,462.09	2,237.13	(696.20)	2,437.26	2,692.00	2,231.00	
Debt	2,362.00	2,362.00	3,820.00	8,352.83	9,445.77	4,440.32	3,555.00	2,763.00	
Total	3,012.00	3,255.65	5,282.09	10,589.96	8,749.57	6,877.58	6,247.00	4,994.00	
Equity to Capital	21.6%	27.4%	27.7%	21.1%	-8.0%	35.4%	43.1%	44.7%	
Average Invested Capital	3,084	3,084	4,094	7,351	7,984	5,779	4,644	4,007	
ROIC	0.94%	0.63%	7.59%	5.29%	2.12%	2.98%	8.41%	5.74%	5.36%
EBITDA/Invested Capital	2.7%	5.0%	14.1%	10.4%	6.5%	8.4%	17.4%	13.7%	11.75%
Cash Flow/Invested Capital	2.65%	4.96%	14.99%	11.06%	3.58%	8.36%	18.65%	13.73%	11.73%
Equity to Capital	22%	27%	28%	21%	-8%	35%	43%	45%	

NRG Holding Period Returns

NRG’s holding period return can be computed from December 2003 for somewhat less than 3 years. The return was very high -- reflecting investor perceptions that the company could successfully emerge from bankruptcy.

NRG Energy From: 02-December-03
Stock Price and Dividends
IRR over holding period 37.1%



PEPCO Holdings, Inc.

Summary

Since PEPCO Holdings' ("PEPCO") profits primarily come from regulated transmission and distribution and because the company sold off most of its generating plants, financial analysis of PEPCO is most relevant for gauging recovery of stranded investment and other retail restructuring issues. The affects of wholesale and retail restructuring on investors and ratepayers must be judged by assessing the financial performance of both PEPCO and Mirant, the company which purchased PEPCO's generating plants. Since PEPCO subsidiary companies operate regulated utilities in different PJM states, the analysis is provides an overview of retail restructuring.

Once the effect of premiums paid by PEPCO in its acquisition of Conectiv (the holding company for Atlantic City Electric and Delmarva Power and Light) are removed, PEPCO's average return on equity from 2000 through 2005 was 14.3%. Potomac Electric Company, PEPCO's transmission and distribution company which sold its generating assets to Mirant, earned 12.0% from 2000 through 2005. These returns are higher than other regulated companies because of gains realized from the sale of generation and from resolution of a contract dispute with Mirant. Without these gains, PEPCO's return would be similar to the return of other regulated companies. That PEPCO's realized returns are above other regulated companies suggests that shareholders rather than ratepayers received the benefits of the sale of generating plants and that the company has recovered its stranded investment.

Company History and Structure

PEPCO Holdings, Inc. was established in 2001 upon completion of the acquisition by PEPCO of Conectiv. Conectiv was the holding company for Delmarva Power & Light Company (DPL) and Atlantic City Electric Company (ACE). After the merger, PEPCO Holdings has three regulated subsidiary companies – Potomac Electric Power Company ("Potomac"), DPL and ACE. Potomac, DPL and ACE have divested substantially all of their generation assets, either by selling them to third parties or transferring them to the non-regulated affiliates of PEPCO. Accordingly, Potomac, DPL and ACE are no longer engaged in generation operations.

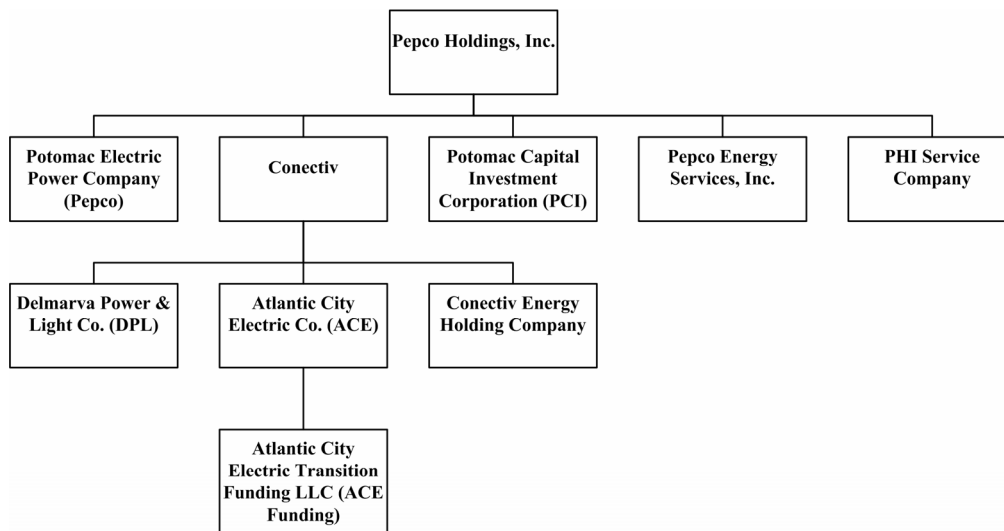
Because of its purchase of Conectiv, PEPCO now owns generating capacity that is held in PECO Energy Services and Conectiv Energy. Among its bilateral contracts are the power supply agreements under which Conectiv Energy sells electricity to DPL to provide service to ratepayers in Delaware and Virginia. Conectiv Energy also sells default supply to customers in ACE's service territory and to other default supply customers in New Jersey. Other than its default supply sales, Conectiv Energy does not currently participate in the retail competitive power supply market.

Pepco Energy Services sells retail electricity and natural gas primarily to commercial, industrial and governmental customers primarily in the mid-Atlantic region.

Pepco Energy Services owns peak-load electricity generation plants with approximately 800 megawatts of peak-load capacity, the output of which is sold in the wholesale market administered by PJM.

Regulated segments of PEPCO represent more than 80% of total income as shown in the table below. PEPCO estimates that the percent of income from regulated operations is projected to decline to 67% in the future. The corporate structure of PEPCO is shown in the diagram below.

PECO Net Income		
	2005	2004
Power Delivery	302.1	227.1
Conectiv Energy	48.1	60.2
Pepco Energy Services	25.7	12.9
Other Non-Regulated	47.9	25.6
Total Before Corporate Overhead	423.8	325.8
Energy Services Percent	6.1%	4.0%
Regulated Percent	82.6%	88.2%



On June 7, 2000, PEPCO sold generating plants with a total capacity of 5,154 MW to Mirant, including four generating stations located in Maryland and Virginia. Mirant paid a total of \$2.74 billion, implying a cost of \$531/kW. The Agreement was reached after Mirant was selected by the PEPCO as the winning bidder in its auction process. The divestiture resulted in the PEPCO recognizing a pre-tax gain of \$423.8 million (\$182 million net of income tax or \$1.58 per share). Following the sale of generating assets, PEPCO entered into several ongoing contractual arrangements with Mirant.

In addition to the Mirant sale, PEPCO sold its 9.72% interest in the Conemaugh Generating Station to PPL and Allegheny for \$156 million on January 8, 2001. This resulted in a pre-tax gain of approximately \$39 million, which was recorded in the first quarter of 2001. The total gain equaled 25% of PEPCO's outstanding common equity. On November 15, 2005, ACE entered into an agreement to sell its undivided interests in the Keystone and Conemaugh generating facilities to Duquesne Light Holdings Inc. for \$173.1 million.

Under the terms of the Maryland and D.C. Agreements, all stranded costs, including future costs related to plant removal associated with divested generation facilities, plus all above-market costs associated with purchased power obligations, regulatory assets and obligations, and related expenses incurred by PEPCO in preparation for the implementation of retail competition were offset against the proceeds from the sale of the Generation Assets.

PEPCO Generation Capacity

PEPCO currently has 5,017 MW of capacity, most of which is oil and gas fired plants purchased as a result of the Connectiv merger. Less than 15% of PEPCO's plants are coal fired base load plants as shown on the table below. Currently, the majority of PEPCO's plants are cycling and peaking units which have earned lower profits in PJM than base load plants. Conectiv Energy's most recently added mid-merit plant, a combined cycle plant located in Bethlehem, Pennsylvania with a generating capacity of 1,092 megawatts, became fully operational in June 2004.

PECO Electric Generating Capacity		
	Capacity MW	Percent
Coal-Fired	731	14.6%
Oil Fired	1,236	24.6%
Combustion Turbines/Combined Cycle	3,019	60.2%
Diesel Units	31	0.6%
Total Electric Generating Capacity	5,017	100.0%

Conectiv states that its generation asset strategy focuses on mid-merit plants with operating flexibility and multi-fuel capability that can quickly change their output level on an economic basis. Like "peak-load" plants, mid-merit plants generally operate during times when demand for electricity rises and prices are higher. However, mid-merit plants usually operate for longer periods of time and for more weeks a year than peak-load plants.

Historic Financial Analysis

In analyzing the profitability of PEPCO, we have reviewed the returns realized by PEPCO on a consolidated basis with and without goodwill and Potomac Electric on a standalone basis. The implication from this analysis is that Potomac Electric has recovered more than its cost of capital from the sale of its plants to Mirant and the recent

settlement. The return on equity for Potomac Electric was above 18% in the year the plants were sold to Mirant and it was 15.7% in 2005 after the contract settlement. For other years the return on equity was in the 9% to 10% range.

The return on equity for PEPCO Holdings is affected by goodwill and the gains of sale from the divestiture. The table below shows that when goodwill is added to the equity balance and when an adjustment is made for impairment losses incurred on equity investments in 2003, the return on equity averages 14.3%. The returns are higher than typical returns of regulated companies because of high realized returns in 2000, the year of the Mirant sale, and in 2005. In 2005, PEPCO realized a gain on settlement of claims with Mirant of \$70.5 million (net of customer sharing.) The issue involving whether the return on equity should be adjusted for goodwill is addressed in the Appendix.

PEPCO Holdings Adjusted and Unadjusted Return on Equity							
Return on Equity	2000	2001	2002	2003	2004	2005	Average
Net Income Before Extraordinary Items	347	163	211	101	261	362	
Impairment Loss				103			
Adjusted Net Income	347	163	211	204	261	362	
Opening Equity	1,910	1,863	1,823	2,973	2,974	3,339	3,339
Closing Equity	1,863	1,823	2,973	2,974	3,339	3,584	3,584
Average Equity	1,886	1,843	2,398	2,973	3,157	3,462	
Goodwill			1,432	1,432	1,431	1,431	
Equity Balance without Goodwill	1,886	1,843	1,682	1,542	1,726	2,030	
ROE - Unadjusted	18.4%	8.9%	8.8%	3.4%	8.3%	10.5%	9.7%
ROE without Goodwill	18.4%	8.9%	12.5%	13.2%	15.1%	17.8%	14.3%
Value Line ROE	9.8%	12.6%	9.2%	7.7%	7.7%	7.7%	9.1%

The return on equity for the Potomac Electric subsidiary has a similar pattern of returns as show on the table below. The returns are high in the year of the Mirant sale in the year of the Mirant settlement.

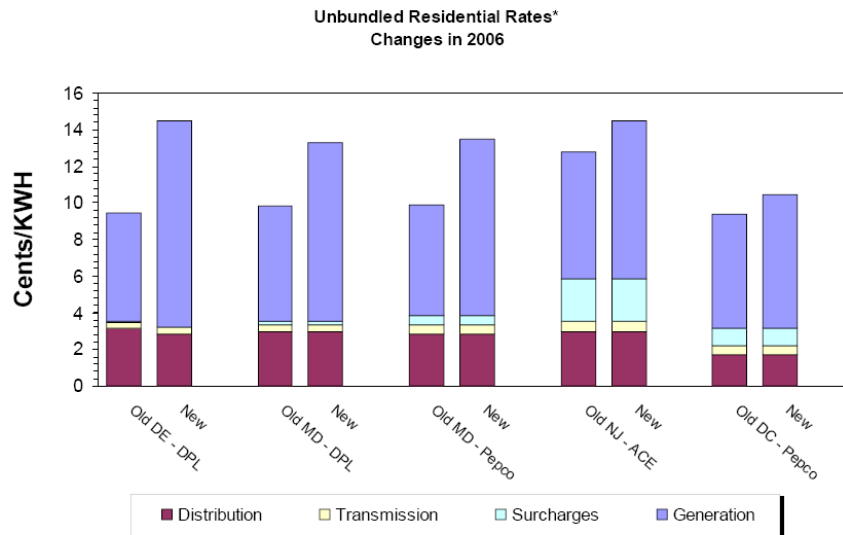
Potomac Electric Power Return on Equity							
Return on Equity	2000	2001	2002	2003	2004	2005	Average
Net Income to Common	347	163	134	101	96	164	
Opening Equity	1,910	1,863	1,823	975	1,012	1,003	
Closing Equity	1,863	1,823	975	1,012	1,003	1,078	
Average Equity	1,886	1,843	1,399	994	1,007	1,040	
ROE	18.4%	8.9%	9.6%	10.2%	9.5%	15.7%	12.0%

The return on invested capital and cash flow ratios for PEPCO Holdings are shown in the table below.

	2000	2001	2002	2003	2004	2005	Average
Return on Invested Capital							
EBIT	895	366	546	611	772	905	
Tax Rate	62%	34%	37%	38%	39%	41%	
Tax Rate in Formula	40%	40%	40%	40%	40%	40%	
NOPLAT	537.06	219.84	327.54	366.42	463.26	543.24	
Invested Capital	4,964	4,093	9,630	9,424	9,308	9,101	
Capital w/o Goodwill	4,964	4,093	8,198	7,992	7,877	7,669	
ROIC	10.6%	4.9%	4.8%	3.8%	4.9%	5.9%	
ROIC - No Goodwill	10.6%	4.9%	5.3%	4.5%	5.8%	7.0%	6.4%
EBIT	895	366	546	611	772	905	
Add: Depreciation		171	240	422	441	423	
EBITDA		537	786	1,033	1,213	1,328	
Adjusted Net Income	347	164	172	178	259	362	
Add: Depreciation	-	171	240	422	441	423	
Add: Deferred Tax		197	197	197	218	(52)	
Cash Flow		532	609	797	917	733	
EBITDA/Investment		13.1%	9.6%	12.9%	15.4%	17.3%	13.7%
Cash Flow/Equity		28.9%	36.2%	51.7%	53.1%	36.1%	41.2%

Segment by Segment Analysis

The segment by segment analysis for PEPCO is used to review retail restructuring in various states that are part of PJM. PEPCO presents the retail rate effects in various states as summarized in the graph below. The graph does not reflect the 25% rate increase recently approved in Virginia.



In reviewing the PEPCO's subsidiaries, we present some of the mechanisms that underlie the changes in rates.

Maryland – PEPCO and DPL

In Maryland, Potomac provides standard offer service (SOS) to residential and small commercial customers through May 2008 and to medium-sized commercial customers through May 2006.¹ Potomac recovers from its SOS customers the cost supply plus an average margin of approximately \$.002 per kilowatt-hour. Delivery rates are capped through December 31, 2006 from an MPSC order issued in connection with the Potomac acquisition of Conectiv². The rate increase for residential customers is 35% to 39%.

Under a settlement approved by the Maryland PSC in April 2003, DPL is required to provide SOS to residential and small commercial customers through May 2008 (and to medium-sized commercial customers through May 2006.) DPL recovers the costs of the SOS supply purchased pursuant to a competitive bid procedure plus an average margin of \$.002 per kilowatt-hour.

District of Columbia -- PEPCO

In the District of Columbia, Potomac is obligated to provide SOS for small commercial and residential customers through May 31, 2011 and for large commercial customers through May 31, 2007. Potomac is allowed to recover the costs associated with the acquisition of the SOS supply obtained pursuant to a competitive bid procedure, plus charges that recover administrative costs including a \$0.00248 per kWh margin. Delivery rates in the District of Columbia generally are capped through July 2007.

Delaware -- DPL

In Delaware, DPL was required to provide provider of last resort (POLR) service to customers in Delaware through April 2006. DPL obtains all of the energy needed to fulfill its POLR obligations in Delaware under a supply agreement with its affiliate Conectiv Energy, which terminated in April 2006. Upon expiration of the rate caps, DPL will provide SOS, and will purchase the power supply required to satisfy its SOS obligations from wholesale suppliers under contracts entered into using a competitive bid procedure. The rate increase for residential customers is 59%.

Virginia -- DPL

Under amendments to the Virginia Electric Utility Restructuring Act implemented in March 2004, DPL is obligated to offer Default Service to customers in Virginia for an indefinite period. DPL currently obtains all of the energy and capacity needed to fulfill its Default Service obligations in Virginia under a supply agreement with Conectiv Energy that commenced on January 1, 2005 and expires in May 2006 (the 2005 Supply Agreement). Delivery rates generally are frozen until December 31, 2010. PEPCO requested a 43% rate increase and was granted a 25% increase as shown in the supplemental materials.

¹ Potomac also had an obligation to provide service at hourly priced rates to the largest customers through May 2006.

² This is subject to an adjustment if FERC transmission rates increase by more than 10%.

New Jersey -- ACE

In New Jersey, electric distribution companies, including ACE, jointly procure the supply to meet their obligations to supply customers from competitive suppliers selected through auctions authorized by the New Jersey Board of Public Utilities (NJBPU) for total requirements each February. ACE is paid tariff delivery rates for the delivery of electricity to both “basic generation service” (BGS) customers and customers in its service territory who have selected another energy supplier. ACE does not make any profit or incur any loss on the supply component of the BGS it provides to customers.

Prospective Returns

As with other companies, the gross margin on generation is expected to increase for PEPCO. PEPCO expects the gross margin on the generation component of its business to increase from \$248 million to \$300 million. This compares with total operating income of about \$700 million. However while the generation returns are expected to increase, investors treat PEPCO as a regulated utility company as demonstrated by the following quote from Value Line:

“At the recent share price, PHI stock’s total-return potential to 2009-2011, though on a par with the industry average, is unexciting. This premise factors in fair rate treatment and a growing contribution from competitive energy operations.”

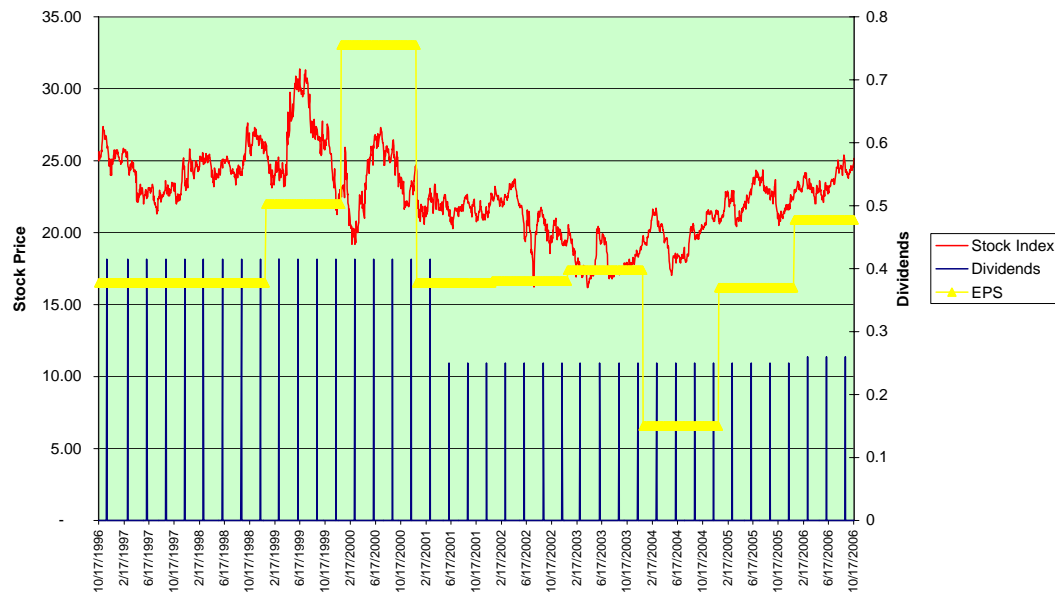
PEPCO Holding Period Returns

Holding period returns have been computed from the perspective of a shareholder who originally held PEPCO shares since 1996, when the company was a regulated vertically integrated utility company. The method used to account for share splits, the exchange ratio in the merger and dividends are explained in the Appendix. The 10-year return illustrates the cumulative return since before de-regulation.

The holding period return demonstrates that PECO had stock price changes and returns that are typical for a regulated utility company. The returns increased after the divestiture of generating plants, but declined after the acquisition of Conectiv.



PEPCO Holdings From: 17-October-96
Stock Price and Dividends
IRR over holding period 5.5%



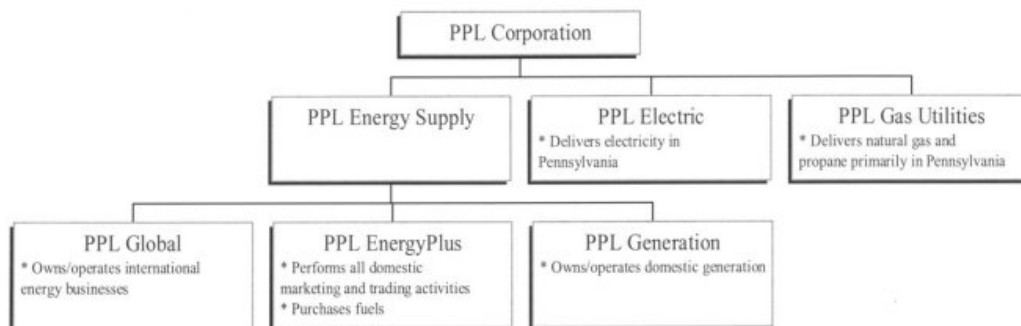
PPL CORPORATION

Summary

PPL has earned a higher return on equity on a consolidated basis than comparable regulated utilities over the past five years. From 2001 through 2005, PPL's return on equity adjusted for goodwill, write-offs and other items was 20%, despite low earnings on its investment in Latin American distribution and problems with trading operations and Telecom investments. PPL is expected to realize large earnings gains as bilateral contracts and rate caps in Pennsylvania expire, although the increase will not occur until 2010. PPL's stock price and holding period return is affected by its trading operations, its Telecom operations and its investment in Latin American and UK distribution.

Company History and Background

PPL Corporation was formed in 1994. It was formerly a vertically owned utility company and now owns distribution operations in Latin America as well as generation throughout the U.S. PPL's current corporate structure is illustrated in the chart below. The subsidiary company that is the focus of this study is the PPL Generation Company. However, PPL does not separately report financial data for this company.



In 2005, 50% of PPL's earnings came from its profits on energy generation and 27% was derived from foreign distribution operations. The company described its operations in the following way:

“PPL generates electricity from power plants in the northeastern and western U.S.; markets wholesale or retail energy primarily in the northeastern and western portions of the U.S.; delivers electricity in Pennsylvania, the U.K. and Latin America; and provides energy services for businesses in the mid-Atlantic and northeastern U.S.”

PPL Capacity

PPL owns 12,274 MW of which 78% is located in PJM. More than 50% of PPL's capacity is base load nuclear and coal capacity that is not exposed to natural gas and oil price volatility. PPL's generating capacity is summarized in the table below:

PPL Capacity Summary		
	MW	Pct of Total
PJM Capacity		
Nuclear	2,124	18.7%
Coal	3,812	33.5%
Hydro	153	1.3%
Gas and Oil	2,792	24.5%
Total PJM	8,881	78.0%
Non-PJM	2,507	22.0%
Total Capacity	11,388	100.0%

Historic Financial Performance

PPL's returns on equity are presented in this section. The basis for computing unadjusted returns is described in Appendix 1. The table below shows that using a variety of different approaches, PPL's return on equity has been well above the regulated utility sample. PPL's historic adjusted return on equity is higher than for any other PJM company. The adjusted return on equity is affected by PPL's nuclear write-off of \$878 million in 1998; its goodwill associated with acquisitions and its accumulated other comprehensive income related to derivatives.

	2001	2002	2003	2004	2005	Average
Return on Equity						
Financial Data for Computing Returns						
Net Income Reported	169	360	734	698	678	
Net Income from Continuing Operations	169	366	733	713	737	
Goodwill and Other Non-Recurring Adjustments	486	232	9	-	-	
Net Income w/o Writeoffs	633	576	720	691	715	
Equity Reported on Balance Sheet	1,857	2,224	3,259	4,239	4,418	
Less: Goodwill	-	474	1,068	1,127	1,070	
Net of Tax Writeoff	878	878	878	878	878	
Depreciation on Writeoff	88	110	132	154	176	
Plus: Accumulated Net Writeoff	790	768	746	724	702	
Less: Accumulated Other Comprehensive Income	(241)	(446)	(297)	(323)	(532)	
Adjusted Equity	2,888	2,964	3,234	4,159	4,582	
Average Adjusted Equity	2,874	2,926	3,099	3,697	4,371	
Average Unadjusted Equity	1,935	2,041	2,742	3,749	4,329	
Return on Equity Statistics						
ROE Unadjusted	8.74%	17.64%	26.77%	18.62%	15.66%	17.49%
ROE Adjusted	22.03%	19.69%	23.23%	18.69%	16.36%	20.00%
ROE - Value Line	20.80%	18.10%	20.20%	16.10%	16.50%	18.34%

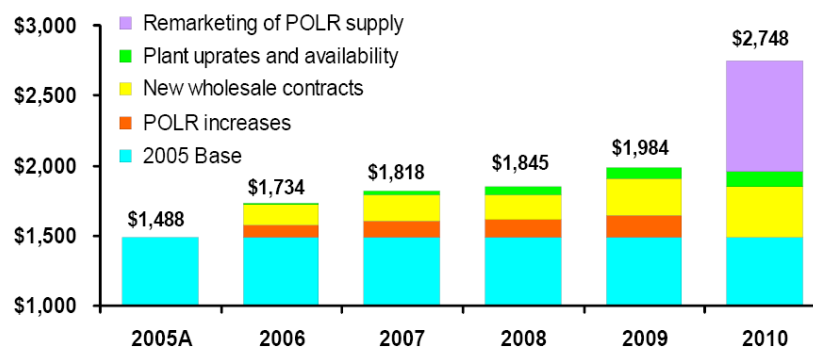
The return on invested capital and the cash flow ratios for PPL are shown in the table below. The table demonstrates that PPL's average return of 9.58% is well above the weighted average cost of capital. Weighted average cost of capital estimates were presented in the failed Exelon/PSEG and the failed Constellation/FPL mergers. These documents estimated a weighted average cost of capital of 5.75% to 6.5%.

	2001	2002	2003	2004	2005	Average
Return on Investment and Cash Flow Returns						
Financial Data for Computing Returns						
Profit and Cash Flow						
EBIT	1,336	1,478	1,635	1,657	1,614	
Tax Rate	35%	35%	35%	35%	35%	
NOPLAT	868	961	1,063	1,077	1,049	
Depreciation	266	367	376	404	420	
EBITDA	1,134	1,328	1,439	1,481	1,469	
Net Income w/o Writeoffs	633	576	720	691	715	
Deferred Tax	283	340	352	434	232	
Cash Flow	1,182	1,283	1,448	1,529	1,367	
Investment						
Adjusted Equity	2,888	2,964	3,234	4,159	4,582	
Add: Interest Bearing Debt	6,604	7,953	8,647	7,840	7,435	
Less: Cash and Investments	400	273	505	628	563	
Ending Invested Capital	9,092	10,644	11,376	11,371	11,454	
Average Invested Capital	8,797	9,868	11,010	11,374	11,413	
Rates of Return						
ROIC	9.87%	9.74%	9.65%	9.47%	9.19%	9.58%
EBITDA/Investment	12.90%	13.45%	13.07%	13.02%	12.87%	13.06%
Cash Flow/Equity	61.10%	62.88%	52.82%	40.79%	31.58%	49.83%

Outlook and Prospective Returns

PPL's prospective earnings are affected by the expiration of bilateral contracts and PJM prices as well as a number of non-recurring items. The increase in returns on the supply segment are expected to be dramatic once ratepayers have to pay for the wholesale market purchases rather than bilateral contracts (PPL uses the term provider of last resort or POLR to describe the rates that are not based on PJM market prices).

*Supply Margins
(Millions)*



PPL projects earnings per share to increase from \$2.08 per share in 2005 to \$2.25 per share in 2006. In subsequent years, earnings are expected to gradually increase and then hit \$3.50 per share in 2010. The earnings projections made by PPL are presented in the back-up materials. Value Line projects earnings increases for PPL as follows: “PPL Corporation’s earnings should wind up much higher in 2006. Last year, a number of unusual items reduced the company’s earnings by \$0.17 a share. In the first nine months of 2006, unusual items were provided by \$0.06 of share earnings. PPL excludes this income from its earnings guidance of \$2.25-\$2.35 a share, and our estimate is at the upper end of that range. But there’s much more to PPL’s profit growth than just a swing in unusual items. The biggest factor is the 8.4% increase in the price that PPL’s power supply business charges to customers of its utility sibling, PPL Utilities which took effect at the start of the year.”

Projected earnings from various sources and the returns on equity are presented in the table below. The base case comes from average earnings guidance provided by PPL and the low case is from low end of the guidance. Analyst projections of PPL’s prospective earnings are similar to the company’s estimates as shown in the table below that are extracted from YahooFinance. Details of the conversion of projected earnings into returns on equity are included in the back-up materials at the end of this section.

Book Value per Share

Shares	380.15
Common Equity Balance (\$ Millions)	
Unadjusted	4,418
Adjusted	4,582
Book Value Per Share	
Unadjusted	11.62
Adjusted	12.05
Stock Price per Share	
End of Year 2006	35.65
End of Study Period	34.06
Market Capital	\$ 13,552
Market to Book Ratio	
Unadjusted	3.07
Adjusted	2.96

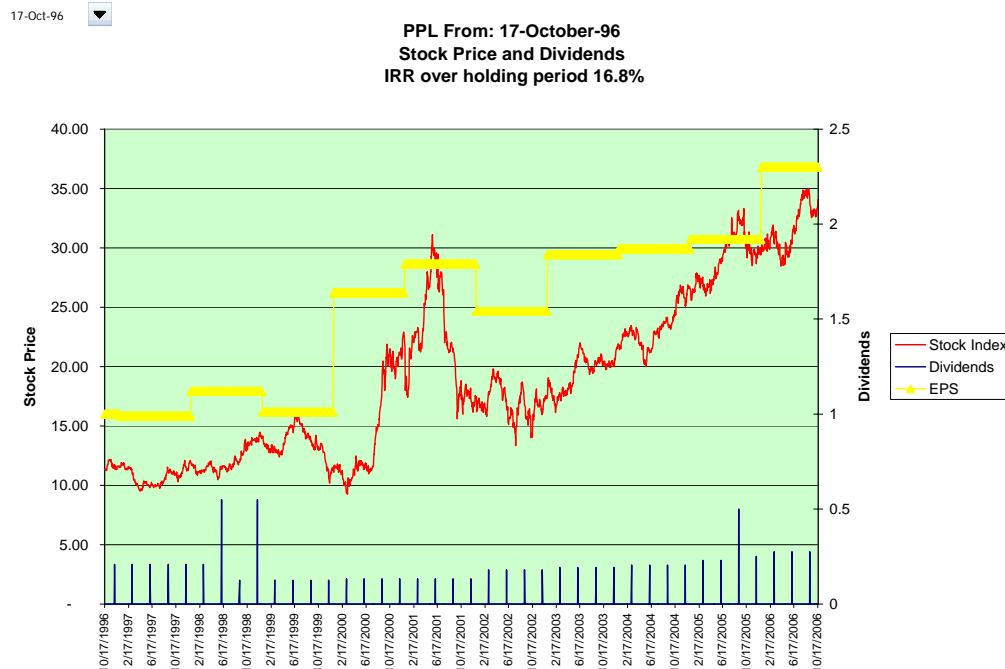
EPS Projection

	2006	2007	2008	2009	2010
EPS Projection (\$/Share)					
PPL Projection					
High	2.30	2.40	2.64	2.90	3.50
Low	2.20	2.30	2.53	2.78	3.50
Value Line	2.35	2.35			3.50
Yahoo	2.33				
ROE Projection (Percentage)					
ROE - High Case	19.0%	18.0%	17.4%	20.5%	23.4%
ROE - Low Case	17.7%	17.4%	18.0%	18.6%	21.7%

Holding Period Returns

Holding period returns for PPL are affected by its activities in the western U.S. markets and its sales to California. PPL's stock price increased during high power prices experienced during the California crisis and came down after it was involved in litigation associated with market power. The company discusses its involvement in the California crisis as follows:

“Through its subsidiaries, PPL has made approximately \$18 million of sales to the California ISO, of which \$17 million has not been paid to PPL subsidiaries. Given the myriad of electricity supply problems faced by the California electric utilities and the California ISO, PPL cannot predict whether or when it will receive payment.”



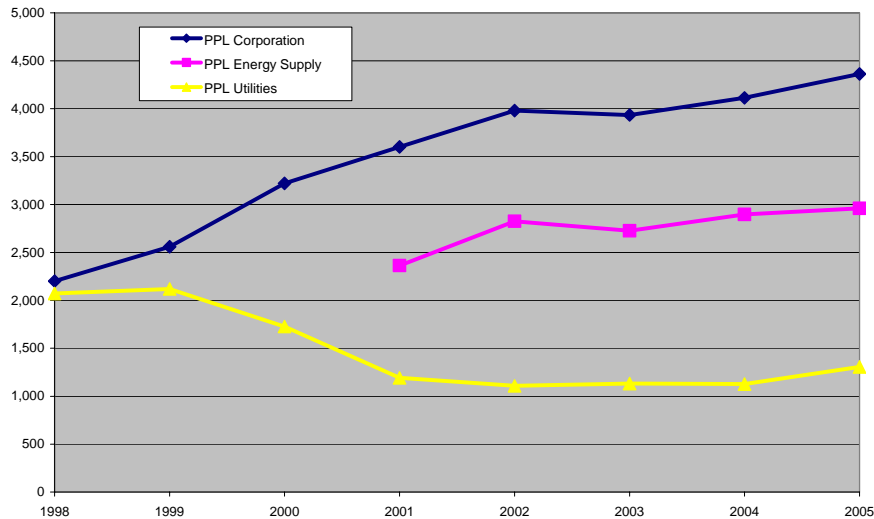
Segment by Segment Analysis

The historic profitability of PPL on a consolidated basis and the PPL Energy and the PPL Utilities segments can be evaluated from information in PPL's 10-K reports. The gross margin for PPL and the energy supply segment has been stable as shown on the graph below. (Data for the Energy Supply segment was not available before 2001.) The graph demonstrates that most of PPL's margin comes from the PPL Energy Supply segment.

We have analyzed PPL's return on a segment basis using available data (the adjustments for write-offs and accumulated other comprehensive income were not

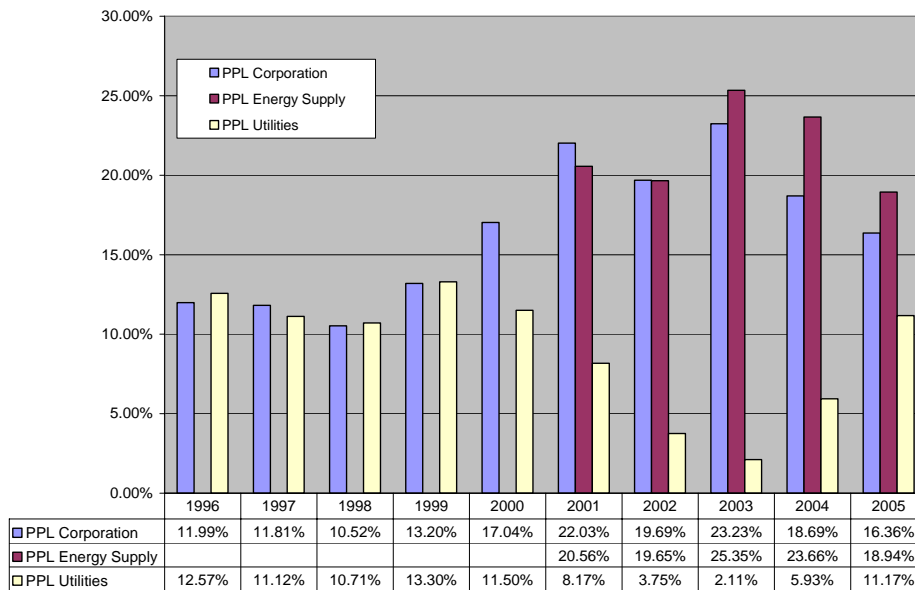
included in the calculations for the Energy Supply or for the Utilities subsidiaries). This analysis demonstrates that returns for the generation portion of the business have been very high even though the company has bilateral contracts. PPL's overall returns were found to exceed returns of regulated companies.

PPL Gross Margin (Revenues less Fuel and PP)



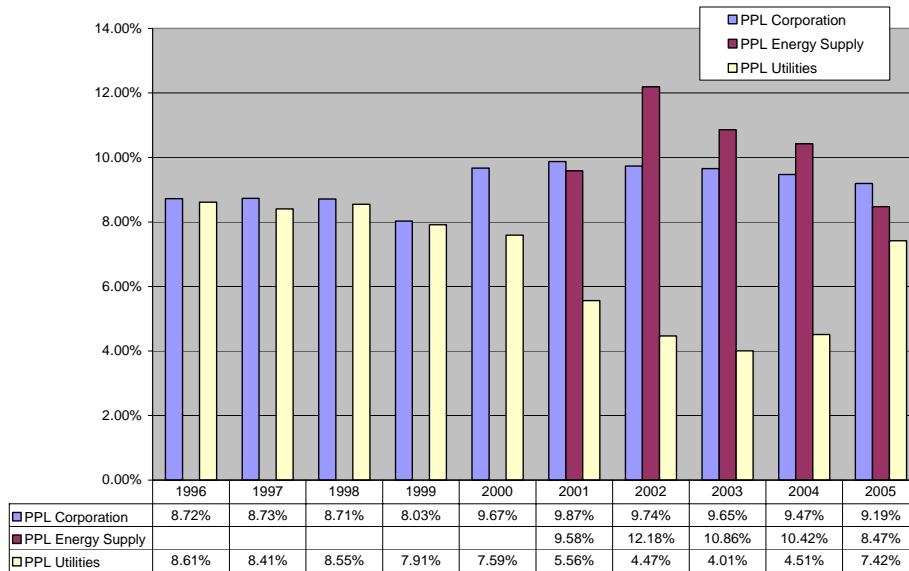
PPL's return on equity for the various segments is shown on the chart below. The low return on equity for the utilities segment is due to the non-US operations. If a typical utility return on equity were attributed to the PPL utilities, the consolidated return would be even higher.

PPL Adjusted ROE



Other measures of return for PPL show a similar pattern as the return on equity -- the ROIC is higher for the Energy Supply segment and has remained strong.

PPL Return on Invested Capital

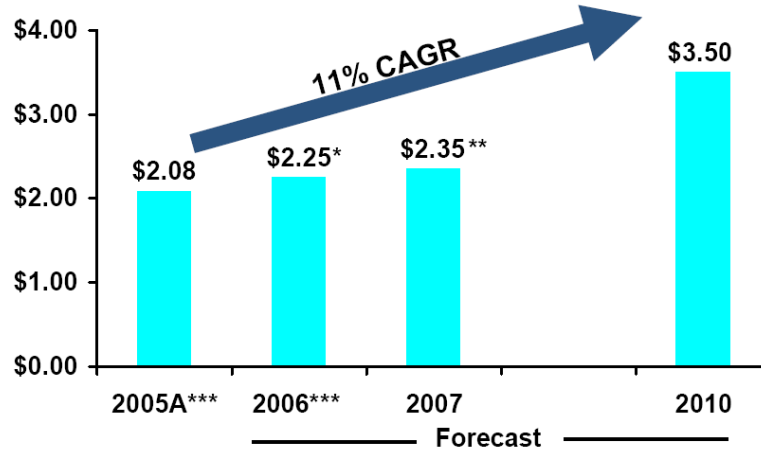


PPL Back-up Materials

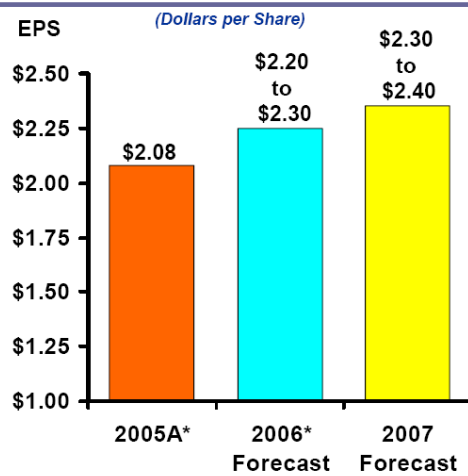
<u>Plant</u>	<u>Net MW Capacity</u>	
<u>Pennsylvania</u>		
Nuclear-fueled steam station		
Susquehanna	2,124	17.3%
Coal-fired steam stations		
Montour	1,540	
Brunner Island	1,483	
Martins Creek	300	
Keystone	211	
Conemaugh	278	
Total coal-fired	3,812	31.1%
Gas- and oil-fired steam station		
Martins Creek	1,670	
Lower Mt. Bethel	582	
Total gas- and oil-fired	2,252	18.3%
Combustion turbines and diesels	451	3.7%
Hydroelectric	153	
Total generating capacity	8,792	71.6%
Firm purchases		
Hydroelectric	140	
Qualifying facilities	295	
Total firm purchases	435	3.5%
Total system capacity - Pennsylvania	9,227	75.2%
Total system capacity - Montana	1,259	10.3%
Total system capacity - Arizona	750	6.1%
Natural gas-fired station		
Wallingford	243	2.0%
Natural gas-fired station		
University Park	540	4.4%
Natural gas- and oil-fired stations		
Edgewood and Shoreham	159	1.3%
Total system capacity - Maine	96	0.8%
Total system capacity - PPL Generation	12,274	100.0%

<u>State</u>	<u>Millions of kWh</u>	<u>Percent</u>
Pennsylvania	44,337	82%
Montana	8,313	15%
Arizona	593	1%
Maine	341	1%
New York	148	0%
Illinois	116	0%
Connecticut	60	0%
Total	53,908	100%

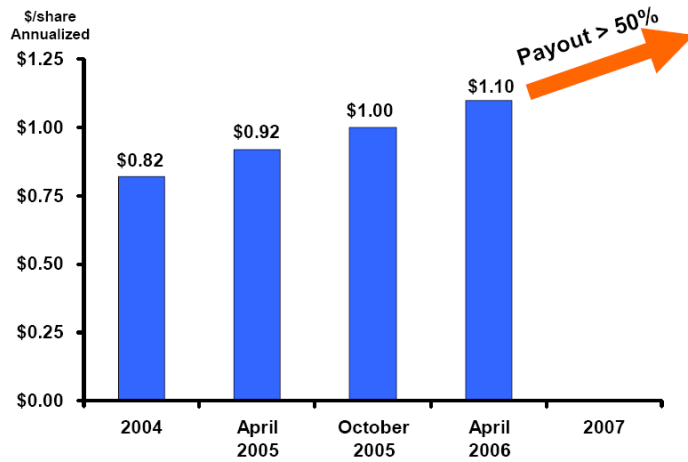
11% Long-Term Growth Rate



2006 and 2007 Earnings Forecast



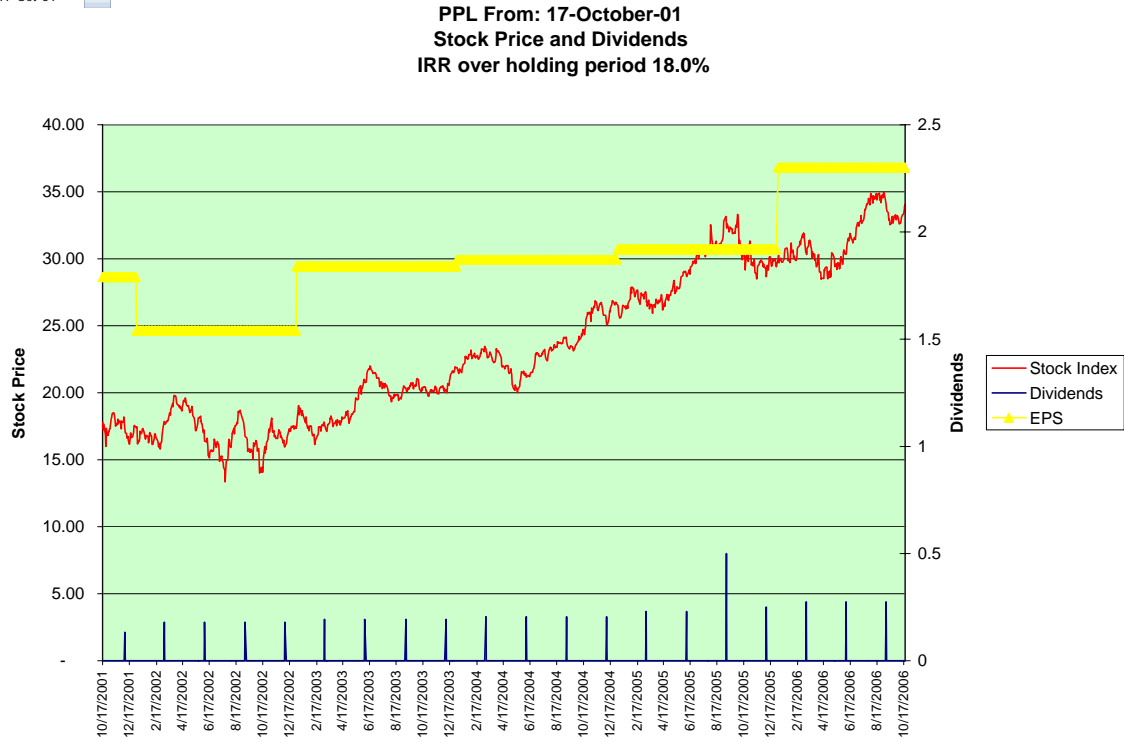
Dividend Payout Ratio Greater than 50% after 20



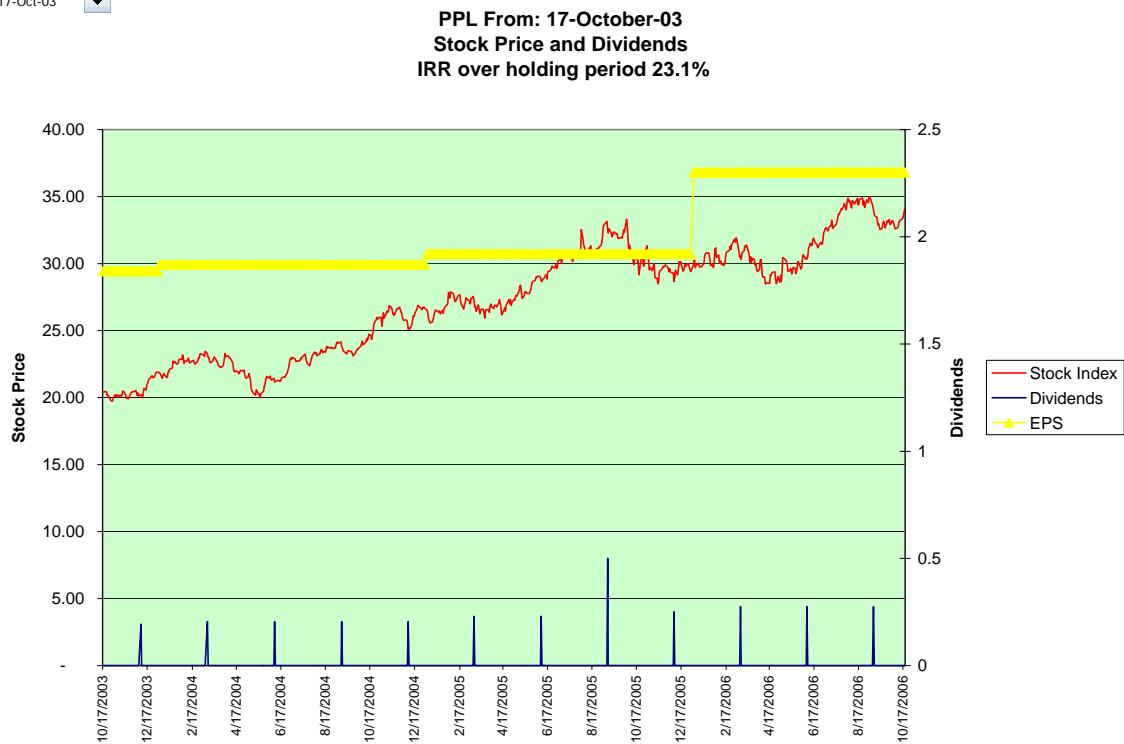
Earnings Est	Current Qtr	Next Qtr	Current Ye	Next Year
	38966	39057	39057	39058
Avg. Estimate	0.6	0.51	2.29	2.37
No. of Analysts	5	5	7	9
Low Estimate	0.55	0.48	2.25	2.30
High Estimate	0.66	0.55	2.35	2.45
Year Ago EPS	0.56	0.52	2.08	2.29

Growth Est	PPL	Industry	Sector	S&P 500
Current Qtr.	0.071	0.088	0.035	0.155
Next Qtr.	-0.019	0.092	0.113	0.073
This Year	0.101	0.102	0.086	0.142
Next Year	0.035	0.138	0.127	0.099
Past 5 Years (per annum)	N/A	N/A	N/A	N/A
Next 5 Years (per annum)	10.5%	0.0745	0.0699	N/A
Price/Earnings (avg. for comparison)	14.5	16.22	16.37	15.75
PEG Ratio (avg. for comparison)	1.38	2.18	2.34	N/A

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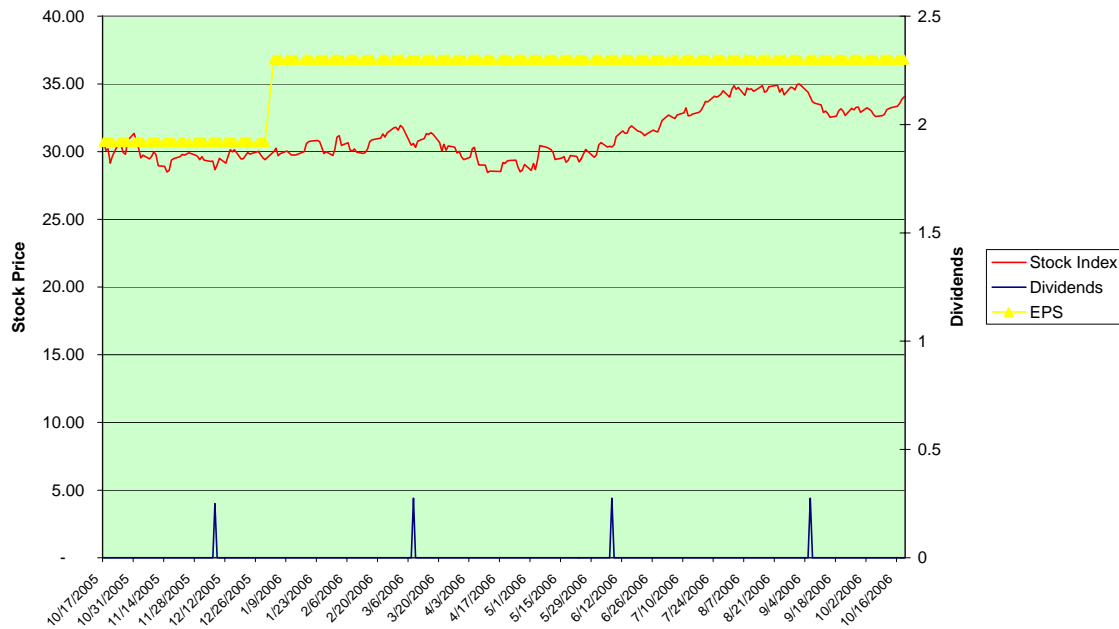
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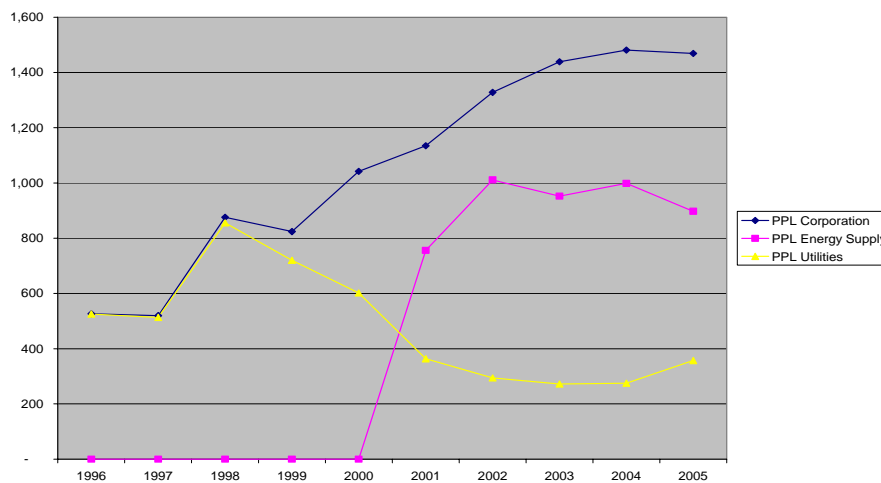
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PPL From: 17-October-05
Stock Price and Dividends
IRR over holding period 14.5%



PPL EBITDA



PPL Generation operates its Pennsylvania and Illinois power plants in conjunction with PJM. PPL Generation's Pennsylvania power plants and PPL EnergyPlus are members of the Reliability First Corporation (RFC), the new regional reliability council that replaced the Mid-Atlantic Area Coordination Council. In Illinois,

PPL's 540 MW natural gas-fired generating station is a party to the Mid-America Interconnected Network Agreement. Refer to "Pennsylvania Delivery Segment" for information regarding PJM's operations and functions and the RFC.

ROE Projection

Prospective ROE - High Case					
Dividend Payout	75%	75%	75%	75%	75%
	2006	2007	2008	2009	2010
Opening Book Value	12.05	12.64	13.22	13.81	14.54
Add: EPS	2.35	2.33	2.35	2.90	3.50
Less: Dividend	1.7625	1.7475	1.7625	2.178	2.625
Closing Book Value	12.64	13.22	13.81	14.54	15.41
Average Book Value	12.35	12.93	13.52	14.17	14.98
ROE	19.0%	18.0%	17.4%	20.5%	23.4%
Shares	380.15	380.15	380.15	380.15	380.15
Equity	4,806	5,027	5,251	5,527	5,859
Dividend Payout	65%	65%	65%	65%	65%
	2006	2007	2008	2009	2010
Opening Book Value	12.05	12.82	13.63	14.51	15.49
Add: EPS	2.20	2.30	2.53	2.78	3.50
Less: Dividend	1.43	1.495	1.6445	1.80895	2.275
Closing Book Value	12.82	13.63	14.51	15.49	16.71
Average Book Value	12.44	13.23	14.07	15.00	16.10
ROE	17.7%	17.4%	18.0%	18.6%	21.7%
Shares	380.15	380.15	380.15	380.15	380.15
Equity	4,875	5,181	5,518	5,888	6,354

Public Service Enterprise Group

Summary

Over the past few years, Public Service Enterprise Group (PSEG) earned consolidated returns that are higher than returns earned by regulated companies, although PSEG's returns were relatively low in 2005. PSEG returns have been affected negatively by investments in Latin America, Asia, and Eastern Europe and by problems in generating plant operations. Despite the low returns on foreign operations, PSEG earned an average return on equity over the past five years of 14.8%. In 2007, PSEG earnings are expected to increase by 28% because of higher energy prices in PJM and improvements in management of generating plants. After that, the company projects earnings to continue increasing because of the expiration of bilateral contracts and increases in PJM capacity prices. Returns from holding PSEG stock have been greater than 19% over the past three years despite problems with foreign investments and trading operations.

Company History and Structure

Public Service Enterprise Group (PSEG) was created in 1985 when the Board of Directors of Public Service Electric and Gas Company (PSE&G), an investor-owned utility, voted to create PSEG as a holding company. The company now has three main subsidiary companies as follows:

- PSE&G, a New Jersey-based regulated electric and gas delivery utility, with 2.1 million electric customers, and \$347 million in operating earnings in 2005.
- PSEG Power, LLC, an unregulated U.S. power generation company, with \$418 million in 2005 operating earnings
- PSEG Energy Holdings, which contains the two unregulated businesses of PSEG Global and PSEG Resources, and \$196 million in 2005 operating earnings. PSEG Global has investments in electric generation and/or distribution facilities in the U.S., Brazil, Chile, China, India, Italy, Oman, Peru, Poland, Taiwan, Tunisia and Venezuela. Projects are being completed in China, Italy and South Korea.

The subsidiary company of most interest for this study is the PSEG Power subsidiary, which was created in 1999 and, according to the company is a “multi-regional, wholesale energy supply company with generating asset operations with wholesale energy, fuel supply, energy trading and marketing and risk management functions.” PSEG Power (sometimes referred to as “Power”) is expected to generate increased returns in the future.

PSEG Capacity

As of December 31, 2005, the U.S. subsidiary – PSEG Power – had a generation portfolio that consisted of approximately 13,846 MW of installed capacity. More than 93% of the US capacity is in PJM. Out of PSEG Power's total capacity, 46% is base load coal and nuclear as shown in the table below.

PSEG Power		
	MW	Pct
PJM Coal	2,862	20.7%
PJM Nuclear	3,494	25.2%
PJM Oil and Gas	6,529	47.2%
Total PJM	12,885	93.1%
Non-PJM	961	6.9%
Grand Total	13,846	100.0%

The table above demonstrates that over one-half of the capacity is base load, implying that it can benefit from the expected prices in the capacity markets. The capacity factor for these nuclear plants has been relatively low -- it was 77% in 2004.

Consolidated Financial Summary

The analysis of PSEG's consolidated financial statements shows that the company experienced high returns for 2001-2003 which declined somewhat in 2004 and 2005. Adjustments to the return on equity calculation are made for accumulated other comprehensive income, write-offs and goodwill. Part of the reason for the high unadjusted earnings in 2002-2003 is the low equity to capital ratio. The returns on equity are shown on the table below.

Financial Statement Data and Ratios	2001	2002	2003	2004	2005	Average
PSEG						
Unadjusted Return on Equity						
Net Income from Continuing Operations	766	405	852	726	661	
Net Income	764	235	1,160	770	858	
Adjustment - Writedown of Project Investments	7	511	-			
Net Income Adjusted	773	916	852	726	661	
Equity Balance						
Common Equity	4,137	3,885	5,529	5,744	6,022	
Adjustments						
Less: Goodwill	649	446	507	622	608	
Less: Accumulated Other Comprehensive Income	(290)	(739)	(201)	(272)	(609)	
Depreciation on Writeoff	(20)	(20)	(20)	(20)	(20)	
Add: Write-off Adjustment	744	724	704	683	663	
Total Equity Adjustment	385	1,017	398	333	664	
Adjusted Equity	4,522	4,902	5,927	6,077	6,686	
Return on Equity						
Unadjusted ROE	18.84%	10.10%	18.10%	12.88%	11.24%	14.23%
Value Line	18.60%	19.70%	15.40%	12.60%	14.20%	16.10%
ROE Adjusted	16.43%	19.44%	15.74%	12.10%	10.36%	14.81%

The return on invested capital and the cash flow ratios for PSEG are shown in the table below. The return on invested capital eliminates distortions in the return on equity affected by the highly leveraged capital structure. The table demonstrates that PSEG's average return on invested capital of 7.8% is above the weighted average cost of capital.

Return on Invested Capital and Cash Flow Ratios

	2001	2002	2003	2004	2005	Average
Profit and Cash Flow						
EBIT	1,404	1,965	1,955	1,802	1,954	
Operating Income						
Tax Rate	0.4	0.4	0.4	0.4	0.4	
NOPLAT	842	1,179	1,173	1,081	1,172	
Depreciation	522	565	527	693	748	
EBITDA	1,926	2,530	2,482	2,495	2,702	
Deferred Tax	(116)	(139)	368	167	224	
Cash Flow	1,179	1,342	1,747	1,586	1,633	
Invested Capital						
Adjusted Equity						
Less: Cash	169	171	548	263	288	
Less: Investments	4,545	4,468	4,808	4,181	4,077	
Add: Short-term Debt		1,490	1,027	1,014	1,636	
Add: Long-term Capital		16,203	18,554	18,437	17,381	
Total Invested Capital	13,054	13,054	14,225	15,007	14,652	
Return on Capital	6.5%	9.0%	8.2%	7.2%	8.0%	7.8%
EBITDA/Invested Cap	14.8%	19.4%	17.4%	16.6%	18.4%	17.3%
Cash Flow/Equity	26.1%	27.4%	29.5%	26.1%	24.4%	26.7%

Prospective Returns

In the future, returns are expected to increase for PSEG, but not to the same extent as other companies in this report. As with other companies studied, the returns are expected to increase as electricity contracts expire and the company can take advantage of higher power prices in the wholesale markets which can be passed on to customers. Because rate caps have already expired in New Jersey, the earnings increase comes from re-contracting under the New Jersey auction rather than termination of bilateral contacts.

The company is expecting higher margins on its generating assets due in part to PJM capacity pricing. PSEG's presentations to financial analysts state that the company expects its plants to earn additional revenue from both the new capacity markets in PJM (as well as in ISO New England) and by "power re-contracting at higher commodity prices." Because the generation is no longer subject to regulation, this margin will accrue directly to shareholders. PSEG projects a 25 to 35% increase in the gross margin on revenue less fuel from 2006 to 2007, from the following sources:

Energy markets =	\$400 to \$500 million
Capacity markets =	\$100 to \$150 million
Other sources =	\$0 to \$50 million
Total =	\$500 to \$700 million.

PSEG Earnings per share are expected to be \$3.65 in 2006 and, according to PSEG investment analyst publications, the earnings are expected to increase to a range of

\$4.60 to \$5.00 in 2007. After that, the earnings are projected to increase by more than 10% per year. The projected earnings and commensurate returns on equity are summarized in the table below. Value Line explains PSEG's prospects as follows:

Earnings progress may be modest until 2007. This year's pluses include lower interest expense and improved nuclear operations... On balance, 2006 earnings may advance only 2% to \$3.65 a share. Higher prices for PSEG Power's generating plants and an increase in electric and gas rates point to a 29% gain in 2007 earnings, to \$4.70 a share.

Using estimates of earnings per share made by PSEG, the prospective return on equity increases to between 18% and 22% as shown below.

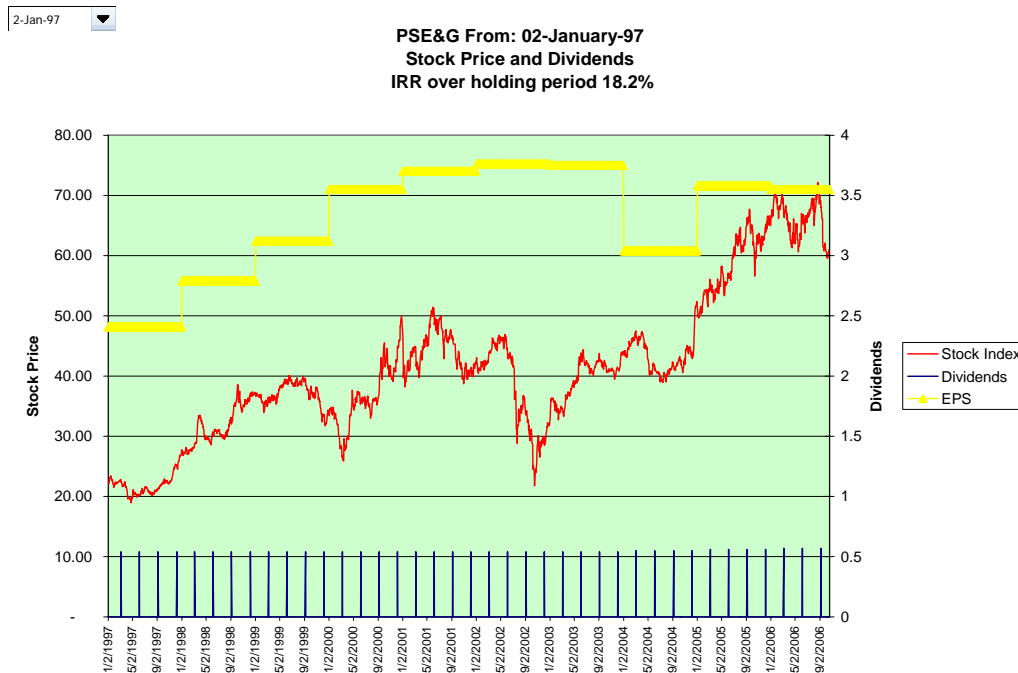
PSEG Summary Statistics

Shares	251			
Common Equity Balance				
As Stated in Financials	6,022			
Adjusted Equity	6,686			
Share Price				
End of 2006	\$	66.38		
End of Study Period	\$	60.80		
Book Value Per Share				
Unadjusted	23.99			
Adjusted	26.64			
Market to Book Ratio				
Unadjusted	2.77			
Adjusted	2.49			
Market Capial (\$ Millions)	\$	16,661		
EPS Projection				
	2006	2007	2008	2009
EPS Projection (\$/Share)				
PSEG Projection				
High	3.65	5.00	5.50	6.05
Low	3.65	4.70	5.17	5.69
Value Line	3.65	4.70		
Yahoo	3.70	4.69		
ROE Projection (Percentage)				
ROE - High Case	15.0%	19.8%	20.9%	22.1%
ROE - Low Case	14.8%	17.8%	18.2%	18.6%

Holding Period Returns

Since the start of restructuring in 1997, the return realized by PSEG investors has been 18% (shown below). Movements in PSEG's share price have been influenced by the investments made in PSEG's Global subsidiary. The increases and subsequent declines are reflected in the following statement made by the company "Global realized

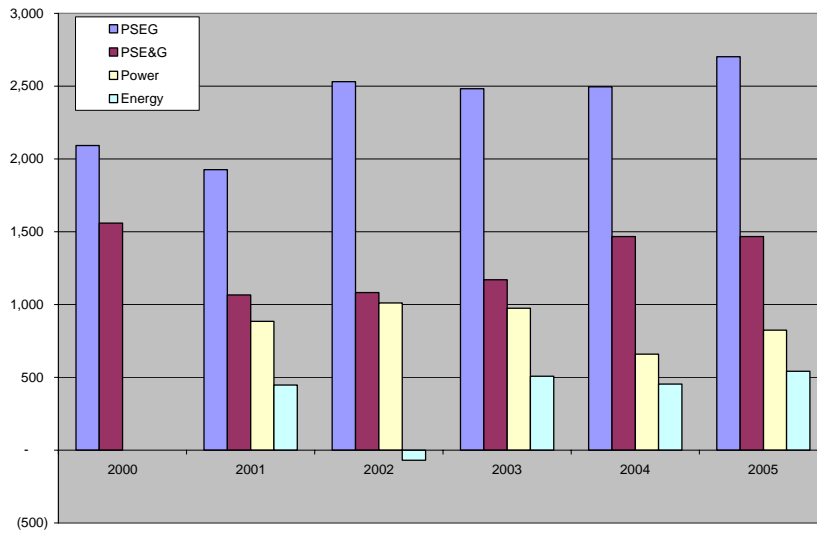
substantial growth prior to 2002, but has been faced with significant challenges as the electricity privatization model has become stressed. These challenges have included political, economic and social crisis in areas such as Argentina, Brazil, Venezuela and India.” Without these problems, PSEG’s return would have been higher and far exceeded the return on the regulated sample.



PSEG Segment by Segment Analysis

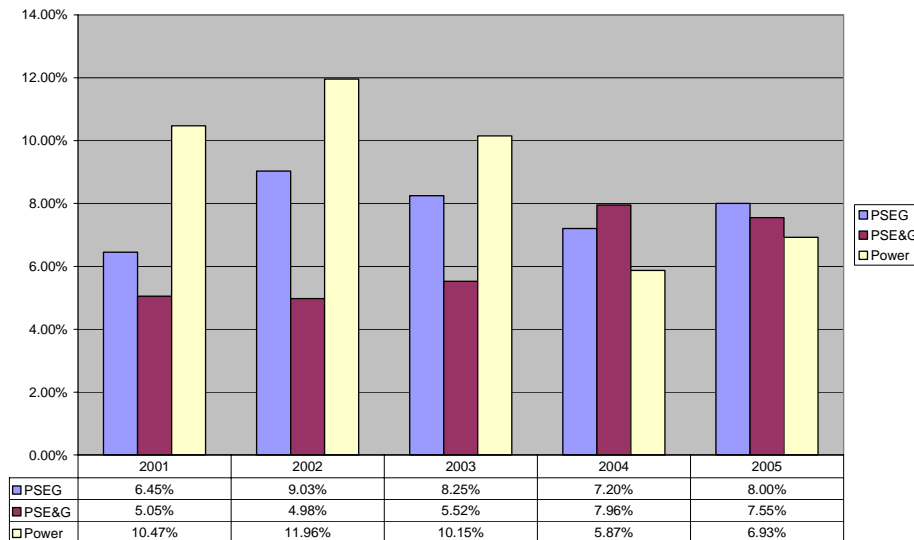
The segment by segment analysis demonstrates recent problems with the PSEG Power subsidiary due to low capacity factors on nuclear plants. The chart below demonstrates that cash flow as measured by EBITDA has grown gradually on a consolidated basis because the Energy segment has offset declines in the power segment.

PSEG EBITDA



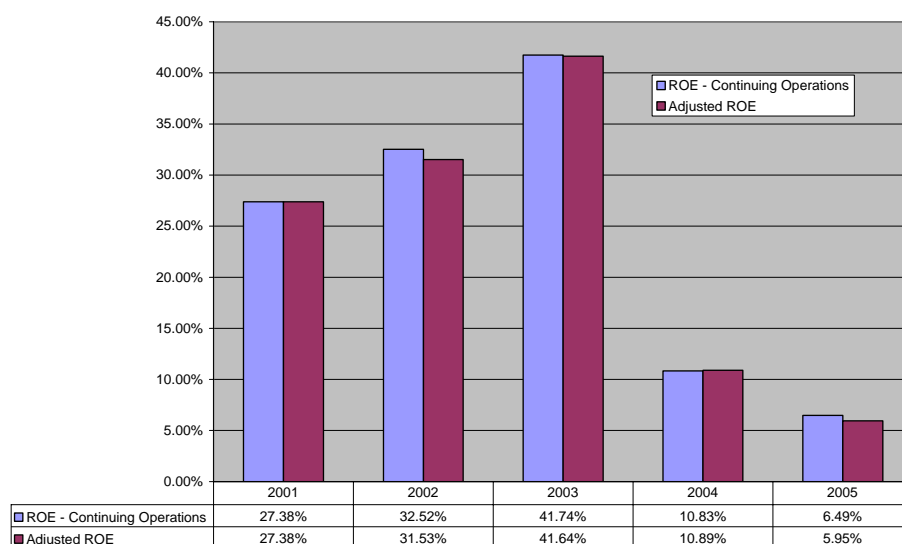
The return on invested capital for the various segments is shown below. The pattern is similar for the EBITDA graph above. The Power segment had experienced high returns and has declined while the regulated distribution company has increased. Prospectively, the return on investment for the PSEG Power subsidiary is expected to rebound and be even higher than it was before 2004.

PSEG Return on Invested Capital

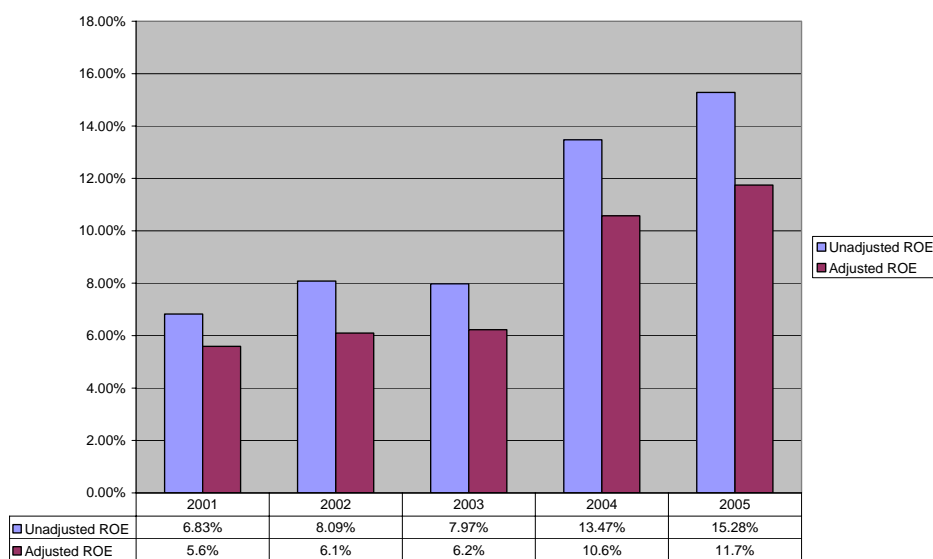


The return on equity for PSEG and for PSE&G – the utility company – is shown in the two graphs below on an adjusted and an unadjusted basis.

PSEG Power - ROE



PSE&G Return on Equity



Reliant Energy

Summary

The financials of Reliant Energy demonstrate that merchant companies require price increases to profit in selling generation into PJM because their purchase price for generating assets was far above the regulated value. Reliant's PJM plants have earned more stable returns than other portions of the company. The gross margin and earnings before interest, tax and depreciation have been stable for the PJM operations while the consolidated cash flow has been volatile. The difference between PJM and other segments means that Reliant's total holding period returns cannot be used to gauge PJM restructuring policy. Reliant's return on capital for its PJM operations was just above 4.7% in 2005 suggesting that the company expects income to increase after the rate caps and contracts expire.

History and Corporate Structure

Reliant Resources was originally created by the utility company which owned Houston Power and Light. It was spun-off in 2002 and became independent of the utility operations while the Texas utility operations became part of Centerpoint Energy. Reliant Energy transferred substantially all of its unregulated businesses to Reliant Resources. In May 2001, Reliant Energy offered 59.8 million shares of its common stock to the public at an initial offering price of \$30 per share (IPO) and received net proceeds of \$1.7 billion. The name of the company changed from Reliant Resources, Inc. to Reliant Energy, Inc. effective April 26, 2004. In March 2003, Reliant discontinued its proprietary trading business.

Reliant grew rapidly through acquisitions. The company paid more than book value and wrote up the value of the assets in these transactions. Reliant records the results of its PJM operations in a separate subsidiary company and presents financial statements for its PJM assets. As with other merchant companies, Reliant experienced a financial downturn in 2001-2002. Unlike Mirant and NRG, Reliant did not declare bankruptcy.

In 2000 Reliant purchased fossil and hydroelectric generating assets, originally constructed by GPU Energy, from Sithe for an aggregate purchase price of \$2.1 billion. Sithe had earlier purchased the assets from GPU in November 1999 for \$1.6 billion, implying a premium of \$400 million.

Reliant Generating Capacity

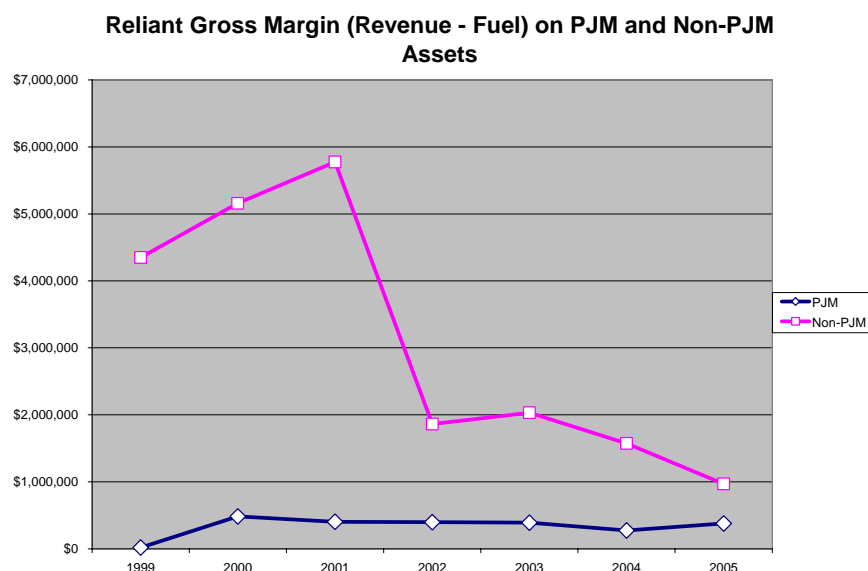
Reliant reported its PJM capacity in detail in its 2004 report and the company did not list its plants in the 2005 report. The Reliant capacity reported in 2004 and 2005 is shown in the table below.

Reliant Capacity Reported in 10-K Reports			
	2005 MW	2004 MW	Percent
PJM	7,264	4,979	26.6%
New York		2,210	11.8%
MISO	1,671	4,473	23.9%
Southeast	2,215	2,210	11.8%
West	3,976	4,034	21.5%
ERCOT	830	831	4.4%
Total	15,956	18,737	100.0%

Reliant's PJM capacity presented in its 2004 report included a list of plants (a similar list was not included in the 2005 report). The plant list shows that 40% of Reliant's PJM capacity is baseload and 60% is peaking and intermediate. The \$2.1 billion purchase price divided by the 4,979 MW in PJM equals an average of \$422/kW. Reliant Energy Mid-Atlantic Power Holdings subsidiary -- REMA -- owns or leases interests in 16 operating electric generation plants in Pennsylvania, New Jersey and Maryland with an annual average net generating capacity of approximately 3,576 MW.

Historic Financial Analysis

In reviewing the historic financial performance of Reliant we focus on the PJM segment of the company and we show how the PJM segment compares with the other portions of the company. The gross margin and cash flow as measured by EBITDA has been much more stable for the PJM subsidiary than for other parts of the company due to the contract with GPU. The gross margin trend is shown below.



This chart has a few implications for analysis of PJM restructuring issues. First, the PJM margin is not representative of the performance of Reliant on a consolidated

basis which means the holding period returns are not a good indication of PJM financial returns experienced by the company. Second, the stability of PJM margins is driven by the contract with GPU. To the extent that Reliant is earning low returns during the contract period, it likely anticipated higher returns after the contract expires to make the investment profitable.

The return on equity for Reliant had extreme swings as shown on the table below. The negative return on equity for PJM was driven by negative net income – the equity balance was relatively stable.

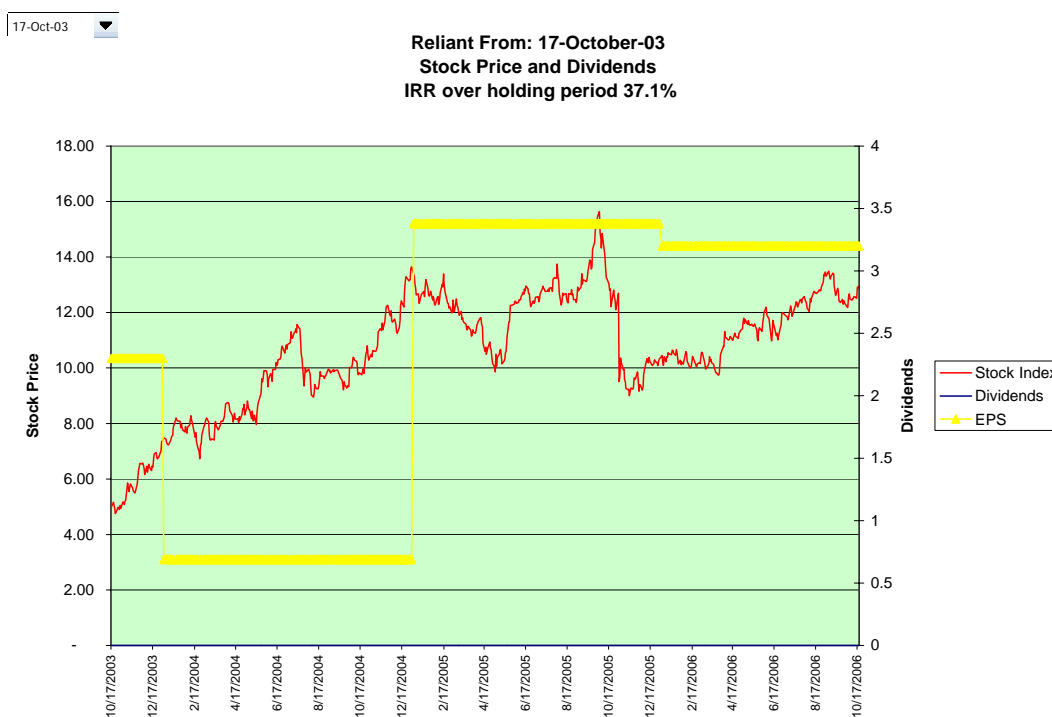
	2000	2001	2002	2003	2004	2005	Average
Net Income							
Consolidated	\$447,111	\$979,701	(559,812)	(1,342,117)	(29,370)	(330,556)	
PJM	\$74,529	(\$440)	(7,569)	(12,927)	(91,392)	102,151	
Net Income from Continuing Operations							
Consolidated	758,552	1,418,785	(326,212)	(402,241)	239,800	110,799	
PJM	\$74,529	(\$440)	(7,569)	(15,232)	(91,392)	102,376	
Emissions Goodwill and Other Writeoffs							
Consolidated	347,531	203,590	128,300	1,066,494	(14,493)	191,322	
PJM			0	2,468	36,955	109,798	
Net Income w/o Writeoffs							
Consolidated	1,106,083	1,622,375	(197,912)	664,253	225,307	302,121	
PJM	74,529	(440)	(7,569)	(12,764)	(54,437)	212,174	
Equity							
Consolidated	2,345,000	5,984,000	5,653,000	4,371,799	4,386,354	3,863,693	
PJM	192,461	360,768	323,652	286,535	286,535	146,999	
Average Equity							
Consolidated	2,345,000	4,164,500	5,818,500	5,012,400	4,379,077	4,125,024	
PJM	192,461	276,615	342,210	305,093	286,535	216,767	
Goodwill							
Consolidated				1,102,877	951,766	612,895	
PJM				161,661	148,904	121,398	
Adjusted Equity							
Consolidated	2,345,000	5,984,000	5,653,000	5,474,676	5,338,120	4,476,588	
PJM	192,461	360,768	323,652	448,196	435,439	268,397	
Average Adjusted Equity							
Consolidated	2,345,000	4,164,500	5,818,500	5,563,838	5,406,398	4,907,354	
PJM	192,461	276,615	342,210	385,924	441,818	351,918	
ROE Unadjusted							
Consolidated	19.1%	16.4%	-9.9%	-30.7%	-0.7%	-8.6%	-6.69%
PJM	38.7%	-0.1%	-2.3%	-4.5%	-31.9%	69.5%	6.12%
ROE Adjusted							
Consolidated	47.2%	39.0%	-3.4%	13.3%	5.1%	7.3%	12.26%
PJM	38.7%	-0.2%	-2.2%	-4.2%	-19.0%	97.9%	14.47%

The performance of Reliant is better evaluated by the return on invested capital due to capitalization of the company. Financial data and the return on invested capital for Reliant are shown on the table below. The EBIT does not include losses on the sales on emissions allowances. The low 2004 income was primarily due to low revenues.

	2000	2001	2002	2003	2004	2005	Average
EBIT							
Consolidated	\$2,377,198	\$2,611,637	\$ 410,909	\$ 590,836	\$ (27,590)	\$ (129,237)	
PJM	\$ 269,381	\$ 80,507	\$ 67,742	\$ 26,819	\$ (64,515)	\$ 72,329	
Tax Rate	35%	35%	35%	35%	35%	35%	
NOPLAT							
Consolidated	1,545,179	1,697,564	267,091	384,043	(17,934)	(84,004)	
PJM	175,098	52,330	44,032	17,432	(41,935)	47,014	
Adjusted Equity							
Consolidated	5,984,000	5,984,000	5,653,000	4,371,799	4,386,354	3,863,693	
PJM	192,461	360,768	323,652	286,535	286,535	146,999	
Total Debt							
Consolidated	11,623,791	9,838,048	7,996,661	6,155,274	5,400,136	5,886,430	
PJM	943,403	1,216,318	938,592	660,865	802,952	857,800	
Cash and Investments							
Consolidated	\$334,699	\$689,936	790,745	891,554	204,483	144,827	
PJM	\$38,107	\$289,417	187,549	85,680	67,681	31,067	
Investment							
Consolidated	17,273,092	15,132,112	12,858,916	9,635,519	9,582,007	9,605,296	
PJM	1,097,757	1,287,669	1,074,695	861,720	1,021,806	973,732	
Average Investment							
Consolidated	17,273,092	16,202,602	13,995,514	11,247,218	9,608,763	9,593,652	
PJM	1,097,757	1,192,713	1,181,182	968,207	941,763	997,769	
Financial Ratios							
ROIC							
Consolidated	8.95%	10.48%	1.91%	3.41%	-0.19%	-0.88%	2.95%
PJM	15.95%	4.39%	3.73%	1.80%	-4.45%	4.71%	2.03%

Reliant Holding Period Returns

The holding period returns for Reliant are affected by the low returns on consolidated operations and the high valuations for energy trading before 2000. In the last three year, the holding period returns have been high – 37% -- from a low base. The returns from the past three years and the past five years are shown below.



22-Oct-01

RRI From: 22-October-01
Stock Price and Dividends
IRR over holding period 0.0%

